UNITED STATES DEPARTMENT OF LABOR
UNITED STATES EMPLOYMENT SERVICE

YOUTH AND EMPLOYMENT OPPORTUNITIES IN ST. CHARLES COUNTY, MISSOURI

A Study of Industrial and Agricultural Trends in Relation to the Demand for Labor in a Rural County Adjacent to the St. Louis Industrial Area

(Preliminary)

June 1939

Prepared by
The Economic Analysis Section
St. Louis Community Survey Center
Division of Standards and Research
United States Employment Service

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The Division of Standards and Research of the United States Employment Service in cooperation with the American Youth Commission is operating four community survey centers, located in Baltimore, Providence, St. Louis, and Dallas. These centers are charged with a dual responsibility, first, to provide state employment services with specific information of local application, and second, to develop methods and procedures which can be applied to the solution of similar problems in comparable areas. The studies fall into four general categories: Job analysis, worker analysis, economic analysis, and procedures analysis. The work of the job analysis section is directed toward an exact description of the activities of the worker in the performance of the duties of his job. The worker analysis section is developing information to describe the qualifications the worker must possess to perform satisfactorily the duties of various jobs. To analyze the demand for and the supply of labor for specific jobs is the objective of the economic analysis section. The facts assembled by these three sections have greatest value when used most effectively. As part of its work the procedures analysis section develops the methods for employment office use of the data prepared by the other three sections.

The American Youth Commission has identified the problems of rural youth to be distinct from those of other special groups and to require particular analysis. This study was designed to determine the employment opportunities for rural youth in a county adjacent to the St. Louis Industrial Area. A similar analysis has been prepared for Franklin County.

It must not be assumed that this study reveals a situation typical of other counties adjacent to large industrial areas. St. Charles County's problems are peculiar to itself. Data for other areas must be collected locally.

This study was conducted by the economic analysis section of the St. Louis Community Survey Center. The field work was completed during September and October 1938. During these months school administrators and farmers were

⁽¹⁾ Local Director, Dreng Bjornaraa Supervisor, Economic Analysis Section, F. R. Foote. Staff of Economic Analysis Section, John B. Parrish, and William H. Wagenbreth.

available for interviews and the shoe factories and other industries were in operation which facilitated the collection of local data.

It was found that the youth of St. Charles County views his future employment possibilities with apprehension, indifference, or eagerness depending upon his temperament and his knowledge of his opportunities. For a fortunate few who will inherit a profitable farm and who have the capacities and interests which make for success in agriculture, the future is bright. For many others, vocational adjustment will present a difficult problem. Increasing mechanization of agricultural processes and declining fertility of the soil are reducing the demand for labor in farm occupations. Local industries provide but limited employment possiblilties. Therefore, many St. Charles County youth will be forced to migrate to the St. Louis Industrial Area in search of employment. But labor surpluses are to be found there in most occupations. What then, are the employment opportunities for youth of St. Charles County? What will they probably be in the future? To what extent do past trends in population, employment, unemployment, and migration throw light upon future possibilities?(2) How may the Missouri State Employment Service provide information and guidance for youth in the selection of a vocation and subsequent employment?

The scope of this brief study will permit only tentative answers to some of these questions. But it is hoped that it will serve to isolate the problems and to suggest steps to be taken by the Employment Service so that it may increase its usefulness to the local community.

922 U. A. Court & Custom House 1114 Market Street St. Louis, Missouri June 1939

⁽²⁾ The St. Louis Community Survey Center has in process a study of the eighth grade graduates, classes of 1929, 1931, and 1933, of public and private schools in St. Charles and Franklin Counties. The data were collected by means of a questionnaire and in the case of persons who migrated to St. Louis, interviews were obtained by members of the staff.

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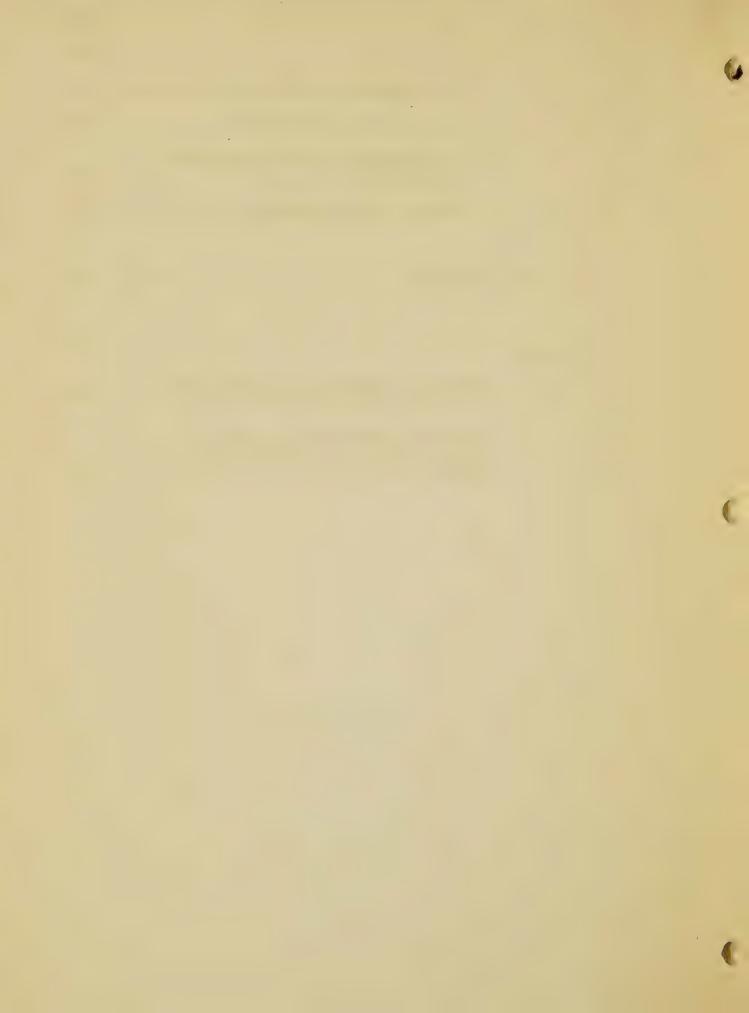
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I. INTRODUCTION

The population of St. Charles County in 1930 was 24,354 persons. With a total land area of 535 square miles, the resulting density of population per square mile was 45.5 persons, compared with a density of population for the State of Missouri of 52.3 persons. (1) When the population of St. Louis and Kansas City are removed from the state totals the figure becomes 35.1 persons per square mile which shows St. Charles possesses above average density of population for counties outside metropolitan areas in Missouri.

St. Charles County is a narrow, wedge-shaped area located at the confluence of the Mississippi and Missouri Rivers, opposite the mouth of the Illinois River. In the early days of river travel, the City of St. Charles, the county seat, was an important trading center. It was the first point of firm, elevated land above the mouth of the Missouri River. For overland traffic to St. Louis of a later period this site became the principal crossing place of the Missouri River. St. Charles City is within a 30 minute drive from St. Louis, and is part of the official St. Louis metropolitan Area, as defined by the Fifteenth Census of the United States in 1930.

In comparison with other Missouri counties, St. Charles is about average in size. The greatest east to west air line distance across the county is about 45 miles. The county's western boundary defines the greatest north to south distance which is about 23 miles.

In a general way, the elevation of St. Charles County ranges from 400 feet along the courses of the Missouri and Mississippi Rivers to 850 feet at the western boundary. About two-thirds of the county's surface is composed of rolling to hilly farm land which is set off from the relatively level bottom lands by a line of limestone bluffs which rise about 200 feet above the river bottoms. (2) Part of the upland area is rough and rocky and for this reason the railroads of the county skirt the base of the bluffs. In the hilly to broken surface areas farm roads usually fellow the ridges rather than land lines. Some 500 of the county's

⁽¹⁾ Official Manual, State of Missouri, 1937 to 1938, Jefferson City, 1938, p. 220.

⁽²⁾ Soil Survey of the O'Fallon Area, Missouri and Illinois, by Elmer O. Flippin and J. A. Drake, United States Department of Agriculture, Bureau of Soils, 1903, 31 pp.

2,000 farms are located in the relatively level river bottoms which cover about one-third of the county's area. (3) The better class of this land is highly productive, well improved, and contains not only some of the best farms in the county, but in the Corn Belt of the United States as well. While subject to periodic overflow, the average farmer on this land will experience two or three good crop years out of five.

Farms adjacent to the river bank are in many cases less subject to overflow than bottom farms adjacent to the bluffs because of the difference in elevation. Well drained farms in the hands of a good operator produce abundant crops of corn, wheat, oats, clover, and timothy. The slightly sandy well drained lands yield heavy crops of alfalfa and truck crops such as potatoes, melons, asparagus, and the like. About 40 percent of this land is used for the production of small grain and hay and about 30 percent for corn. Cash grain farming is predominant in this part of St. Charles County.

The eastern one-third of the upland soil is also fairly productive. This rolling to hilly land with proper treatment produces good crops of wheat, corn, oats, clover, alfalfa, and fruit. General farming, livestock, and dairy farming, are the practice in this part of the county. In the early period of the county's settlement, forests covered a good part of this area, but today, less than 10 percent of it is in woodland. About 10 to 20 percent of this land is kept in open pasture.

It is estimated that over half of the original surface of the soil has been carried off by erosion. (5) Sheet erosion has lowered the entire layer of top soil and gully erosion has cut away many layers of soil as the streams have cut deeper and wider channels into the land surface.

The remaining two-thirds of the upland is largely composed of a prairie type of soil. A small, hilly to rough area located in the southwestern part of the county is good only for timber or pasture. The pairie

(4) Op. cit.

⁽³⁾ Estimates of the County Agricultural Agent, St. Charles, Missouri.

⁽⁵⁾ Soil Erosion in Missouri, by T. D. Baver, Columbia, Missouri, University of Missouri, College of Agriculture, Agricultural Experiment Station, April 1933, Reprint April 1937, p. 53.

type soil is of but average productivity. Corn, bluegrass, oats and wheat are the principal crops. Clover or alfalfa are not well adapted to this thin, tight, poorly drained, clayey soil. Livestock and general farming are practiced along with some dairying. Seasons of normal rain-fall will produce fair crops, but in wet and dry seasons, crops are very materially reduced. Probably 10 to 20 percent of this area is in woodland, and 20 to 30 percent in open pasture. (6)

The average annual precipitation at St. Charles City is 36.82 inches which is well distributed over the growing season and is adequate for the types of crops in the area. The average length of the growing season is 193 days a year.

⁽⁶⁾ Op. cit., pp. 41 to 47.

II. THE SUPPLY OF LABOR

A. Population Trends

l. The Rural and Urban Population. During the last two decades a large proportion of the rural counties in Missouri have been losing population. During the decade from 1910 to 1920, 89 counties of the 114 into which the state is divided, showed decreases, and only 25 showed increases in population. During the next decade, 94 showed a decrease; and 20 an increase.

During the decade from 1910 to 1920, St. Charles County was among the counties in the state losing population. The county experienced a decrease of 6.8 percent. During the next decade, 1920 to 1930 however, the county had an increase in population of 6.7 percent. The upward trend was in opposition to that of most Missouri counties.

If the population of St. Charles County be broken down into its rural and urban components, it will be readily seen that the two have taken very divergent directions during the last 20 years.

The rural population of St. Charles has decreased steadily since 1900, as shown in the following figures:

TABLE 1. - RURAL POPULATION, AND PERCENT DECREASE, ST. CHARLES COUNTY, MISSOURI, 1900 TO 1930(1)

Year	Number	Percent decrease
1930	13,863	3.2
1920	14,325	6.1
1910	15,258	7.5
1900	16,492	

(1) Data for 1930 and 1920 from Fifteenth Census of the United States, 1930, Population, vol. III, pt. I, table 13, p. 1345; data for 1910 and 1900 from Fourteenth Census of the United States, 1920, Population, vol. I, table 50, p. 163.

These figures show a consistent decrease every decade since 1900, but the rate of decrease has been slowing up. The decrease in rural population may be contrasted to the changes in the urban population which are shown in the following figures:

TABLE 2. - URBAN POPULATION, AND PERCENT CHANGE, ST. CHARLES COUNTY, MISSOURI, 1900 TO 1930(1)

Year	Number	Percent increase or decrease
1930	10,491	+23.4
1920	8,503	- 9.9
1910	9,437	+18.2
1900	7,982	

(1) See table 1, loc. cit.

The urban population increased considerably from 1900 to 1910, then showed a decrease from 1910 to 1920 but for 1920 to 1930 showed a very large increase, amounting to almost 25 percent. This increase in urban population from 1920 to 1930 is the sole explanation for the increase in population of the county as a whole during that period. In view of the fact that this urban population consists entirely of the population in the City of St. Charles, it may be seen that the population increase in the county from 1920 to 1930 is due entirely to the growth of that city. From the standpoint of employment opportunities these trends indicate that in agriculture employment opportunities have been declining since 1900, while industrial opportunities have been increasing since 1920.

The contrast between the urban and rural areas may be seen from a comparison between the towns and the other rural population as shown in table 3. During the decade 1920 to 1930, the "other population" declined nearly 3 percent, while the towns increased about 6 percent because of the rapid growth of the towns in contrast to the slow decline of the rural area. The nonfarm growth was not general over the county but was confined chiefly to the City of St. Charles.

In the future, therefore, whether a large migration takes place out of the county depends to a large

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Area	1930	1920	1910	Percent gain or loss 1920 to 1930	Percent gain or loss 1910 to 1920	Percent gain or loss 1910 to 1930
Wentzville O'Fallon St. Peters Augusta Portage Des Sioux St. Charles (urban)	596 594 248 232 248 10,491	308 283	539 269 267 218 9,437	-24.7 -12.4	- 4.6 +33.1 +15.4 +29.8 - 9.9	+10.6 - 7.8 -13.1 +13.8 +11.2
Total towns Other population		10,554			- 1.6 -12.1	+15.6
St. Charles County	24,354	22,828	24,695	+ 6.7	- 7.6	- 1.4

⁽¹⁾ Fifteenth Census of the United States, 1930, Population, table 4, p. 618.

extent upon whether there is an increase or decrease in the employment opportunities in the city of St. Charles. Migration out of this County would have been much greater during the 1920's had not the expansion of employment in St. Charles absorbed many of the rural youth.

2. <u>Composition of the Population</u>. The population in St. Charles County is made up almost entirely of native born whites. The percentage of foreign born whites and Negroes is negligible.

Table 4 shows the basic data for 1930 and 1920, with estimates for 1940. Native whites constituted 89 percent of the population in 1920, and this increased to 92 percent by 1930. It is estimated that by 1940 the native whites will constitute 95 percent of the population. In 1920 the foreign born white and Negroes constituted 5.4 percent and 5.5 percent of the population, respectively. By 1930 they constituted only 3.2 percent and 4.4 percent respectively. Estimates for 1940 indicate that foreign born white will make up 1.8 percent of the population and Negroes, 3.2 percent.

St. Charles County is therefore, not confronted with problems arising from the composition of the population.

TABLE 4. - COMPOSITION OF THE POPULATION IN ST. CHARLES COUNTY, MISSOURI, 1920 AND 1930, WITH ESTIMATES FOR 1940

Item	1940	1.930	1920
Total population	25,714	24,354	22,828
Male Female	12,996 12,718	12,313 12,041	
Native white	24,425	22,501	20,341
Male Female	12,312	11,328 11,173	
Native parentage Foreign parentage Mixed parentage		17,013 2,842 2,646	
Foreign born white	450	789	1,237
Male Female	240 210	432 357	
Negro	839	1,063	1,249
Male Female	444 395	552 511	
Other races		1	
Percent native white Percent foreign born white Percent Negro	95.0 1.8 3.2	92.4 3.2 4.4	89.1 5.4 5.5

Source: Data for 1920 and 1930 from the Fifteenth Census of the United States, 1930, Population, vol. III, pt. I, table 13, p. 1341. For estimates for 1940 see appendix, tables 27 to 29, pp. 56 to 58.

B. Migration

One of the most striking facts in the trend of the distribution of the nations gainful workers since 1870 is the



TABLE 5. - POPULATION BY AGE, COLOR, NATIVITY AND SEX, ST. CHARLES COUNTY, MISSOURI, 1930

Age	All classes			Native white		Foreign- born white		Negro	
group	Total	Male	Female	Male	Female	Male	Fe- male	Male	Fe-
All ages	24,354	12,313	12,041	11,328	11,173	432	357	552	511
Under 5 Under 1	2,210 452	1,121 226	1,089 226		1,038 216	-	-	39 7	51 10
5 to 9 10 to 14 15 to 19 20 to 24 25 to 29 30 to 34 35 to 44 45 to 54 55 to 64 65 to 74 75 and over Unknown	2,303 2,276 2,132 1,934 1,722 1,719 3,254 2,671 2,195 1,413 521	1,140 1,098 945 828 838		1,091 1,047 893 784 793 1,546 1,216 985 584	1,219	1 2 10 8 13	1 3 1 8 7 40 60 70 90 76	43 48 49 42 36 32 87 66 58 36 16	56 51 44 45 33 26 72 47 46 26 14

Source: Fifteenth Census of the United States, 1930, Population, vol. III, pt. I, p. 1335.

decline in the proportion of those engaged in agricultural occupations. In 1870, 53.0 percent of the nation's gainful workers were engaged in agriculture. By 1930 the proportion of agricultural workers had dropped to 21.4 percent. By 1910 the relative decline became absolute and in the two ensuing decades the actual number of workers engaged in agriculture dropped from over eleven and one-half million to less than ten and one-half million. (1) These figures mean that for the last 60 years and more, the nation's agricultural workers have left their farms and migrated to the factories, the shops, and the offices of the city. These migrants from the farm to the city are predominently young adults.

⁽¹⁾ Department of Commerce, Bureau of the Census, Press release No. 16199, October 23, 1938.

TABLE 6. - ESTIMATES OF MIGRATION FOR NATIVE WHITE POPULA-TION BY SEX AND SELECTED AGE GROUP, ST. CHARLES COUNTY, MISSOURI, 1920 TO 1930

	Popula- tion	tion Loss 1)20		au	e to	
Sex	10 to 19 in 1920	20 to 29 in 1930	Number	Percent		Percent
Total	4,183	3,473	710	17.0	597	14.3
Male Female	2,019 2,164	1,677 1,796	342 368	16.9 17.0	254 343	12.6 15.9

More females migrate than males. These tendencies result in a farm population which is definitely masculine and in an urban population which is becoming more and more female in its composition. (2)

Estimates of migration for the native white population of St. Charles County indicate that 12.6 percent of the males, and 15.9 percent of the females who were between the ages of 10 and 19 in 1920 had migrated by 1930. This represents a total of 597 persons of the 4,183 who were 10 to 19 years of age in 1920. (See table 6)

An examination of the ratios of males to females for St. Charles County by nativity and place of residence throws additional light upon the problems of migration, and substantiates the general conclusions. In 1930 in St. Charles there were 102.3 males for every 100 females. For white, and native white, respectively, these ratios were 102.0, and 101.4. These ratios agree very closely with those for the United States, but the proportion of males is somewhat higher than for the State of Missouri. For the urban population in St. Charles County the number of males per 100 females is 92.3. This is a somewhat lower proportion of males than that existing in St. Louis City where the ratio is 95.6, and the United States urban population, with 98.1 males for every 100 females. The number of males per 100 females in the rural farm population in St. Charles County is 118.6. This ratio

⁽²⁾ The Problems of a Changing Population, National Resources Committee, May 1908, pp. 109 to 110.

TABLE 7. - NUMBER OF MALES PER 100 FEMALES IN THE URBAN AND RURAL AND WHITE AND NATIVE WHITE POPULATION FOR SELECTED AREAS, 1930

A	Number of males per 100 females							
Area and nativity	All classes	Urban	Rural	Rural farm	Rural non- farm			
United States	102.5	98.1	108.3	111.0	105.0			
White Native white	102.7	98.4 96.0	109.0	112.7	104.7			
Missouri	100.9	95.0	107.5	111.8	100.6			
White Native white	100.9	94.7 93.2	107.3	111.7	100.2			
St. Louis City	95.6	95.6	-	~	-			
White Native white	95.4 93.1	95.4 93.1	nguri vido	and salps				
St. Charles County	102.3	92.3	110.5	118.6	95.9			
White Native white	102.0				-			

may be compared with those for the United States and for the State of Missouri, which are 111.0 and 111.8 respectively. (See table 7) These ratios suggest that young farm women in St. Charles County migrate to the City of St. Charles where they may obtain employment in the shoe factory and in service industries. Over 40 percent of the employees in the shoe industry in St. Charles County are women which undoubtedly serves as an attraction to many farm girls to leave the farming communities. The young men who migrate from farming communities to the City of St. Charles and secure employment there may remain on their jobs only long enough to secure training and experience when they secure employment in St. Louis. Another contributing factor to the low ratio of males to females in St. Charles City is the location there of a women's college with some 40 to 50 women on the faculty. The proximity of St. Charles to St. Louis permits workers in



St. Louis to maintain residences in St. Charles. These cases are frequently those of persons in the higher income groups whose homes are staffed by female servants who have migrated from local farming communities.

TABLE 8. - ESTIMATED POPULATION BY AGE, COLOR, NATIVITY AND SEX, ST. CHARLES COUNTY, MISSOURI, 1940

Age	All	l classes		Native white		Foreign- born white		Negro	
group	Total	Male	Female	Male	Female	Male	Fe- male	Male	Fe- male
All ages 0 to 9 10 to 14 15 to 19 20 to 24 25 to 29 30 to 34 35 to 39 40 to 44 45 to 54 55 to 64 65 to 74 75 to 84 85 and over	25,714 4,568 2,287 2,252 1,938 1,678 1,642 1,642 2,970 2,441 1,670 690 90	2,342 1,154 1,181 1,006 886 892	2,226	12,312 2,288 1,132 1,150 982 852 847 738 739 1,396 1,128 752 280 28	12,113 2,153 1,091 1,039 907 781 920 827 838 1,394 1,115 734 282 32	240 - 1 1 2 10 8 13 28 51 61 54 11	210 - 1 3 1 1 8 7 37 51 49 41 11	444 54 22 30 23 32 35 30 26 66 59 44 19 4	395 73 42 31 22 10 33 31 19 49 37 30 14 4

C. Population Trends, 1930 to 1940

The trend of population in St. Charles County, 1930 to 1940, depends upon the number of births, the number of deaths, and the net influence of migration. It appears reasonable to assume that age specific death rates, for the United States as a whole, would be applicable to the St. Charles County population, by color, nativity, and sex. Likewise, a reasonably close estimate of the number of children living in 1940 may be obtained by determining the ratio of children under 10, to females 20 to 44 in 1930, and then applying this ratio to the estimated number of females, 20 to 44 in 1940.

The factor most difficult to estimate is that of migration. The most reasonable assumption to be made with regard to migration seems to be that the trend existing between 1920 and 1930, will be continued from 1930 to 1940 because the relationship between employment conditions in the county, and those existing elsewhere in the '20's, was about the same as in the '30's. It has been announced that by August 1939, the car shops in St. Charles City will begin operations which will continue for 18 months, and which will furnish employment to, 500 to 550 men. It is estimated that there will be very few persons coming into the county to fill the positions thus made available, because it is believed that a sufficient supply of workmen are already available in the county. They are either employed in the car shops in St. Louis, or working at other jobs in the county. It appears, therefore, from data to be found in appendix and table 8, that the total population of St. Charles County in 1940, will be in the neighborhood of 25,714 persons. This represents an increase of 5.5 percent over the 1930 figure of 24,354.

D. <u>Unemployment</u>

l. Extent of Unemployment. The extent of unemployment in St. Charles county will be studied from four sources: (a) The Unemployment Census, 1930; (b) The Census of Partial Employment, Unemployment, and Occupations, November, 1937; (c) Persons on relief; (d) Registrants with the Missouri State, Employment Service.

a. The Unemployment Census, 1930. The unemployment census of 1930 has been criticized on the grounds that it understated the extent of unemployment. It is difficult to estimate the degree of under enumeration in a small area like St. Charles County, but if we allow for an under enumeration of one-third, the numbers unemployed would have been recorded as 516, or 5.5 percent of all gainful workers. Unemployment existed but was not a critical problem in 1930, according to the above data. The following table gives the figures reported by the 1930 census:

Total Number of gainful workers, 1930 (less unpaid family workers in agriculture) + - - - 8,936(3)

Total number of unemployed gainful workers, 1930 387(4)

Percent gainful workers unemployed, 1930 - - - 4.3

⁽³⁾ See appendix, table 31, p. 61.

⁽⁴⁾ See appendix, table 33, p. 63.

The more serious nature of unemployment in 1930 is revealed when it is noted that of the 387 unemployed in the county, 310 were in the City of St. Charles. In 1930, the latter had 4,237 gainful workers. Without allowing for under enumeration, approximately 7.3 percent were unemployed.

b. The Census of Partial Employment, Unemployment, and Occupations, November, 1937. The extent of unemployment was much greater in 1937 according to the Census of Partial Employment, Unemployment, and Occupations, November, 1937. The following figures show the estimated number of gainful workers and the estimated number of the totally unemployed and emergency workers, 1937.

TABLE 9. - ESTIMATED GAINFUL AND UNEMPLOYED WORKERS AND PERCENT UNEMPLOYED, ST. CHARLES COUNTY, MISSOURI, 1937

Sex	Estimated number of gainful workers, 1937(1)	Estimated number of totally unemployed and emergency workers, 1937	Percent unemployed
Total	10,028	1,095	10.9
Male Female	7,674 2,354	756 339	9.9 14.4

(1) See appendix, table 31, p. 61.

Unemployment evidently was more than twice as severe in 1937 as in 1930.

c. Persons on Relief. For the twelve-month period, July 1934 to June 1935, the average number of persons on emergency relief was 1,704. (5) This was 7.0 percent of the 1930 population. The State of Missouri during the same period had 16 percent of its 1930 population on the relief rells indicating that St. Charles County was in a more favorable position than the average county in regard to its relief problem. The county had the third lowest relief load of all counties in the state.

⁽⁵⁾ United States Department of Commerce, Bureau of Foreign and Domestic Commerce, Consumer Market Data Handbook, 1936, Market Research Series, No. 15, June 1936, Washington, D. C., pp. R151 to R157, L306 to L308.

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Local sources confirmed the fact that the relief problem was greatly reduced during 1934, 1935 and part of 1936, by the large amount of construction work which took place. The federal government undertook extensive river work, the Wabash Railroad with federal assistance constructed a bridge a mile and a quarter long, the National Park Service built the Children's Vacation Area on the Cuivre River. These absorbed most of the surplus labor in the county, thus reducing the relief load during 1934 to 1936. Most of the work was completed by 1936, and an increase in the relief load apparently took place in 1937.

The large amount of special employment 1934 to 1936 tended to cover up the economic insecurity and the limited opportunities in St. Charles County.

d. Registrants with the Missouri State Employment Service. The active file of the Missouri State Employment Office in St. Charles County (located at St. Charles, Missouri) contained 585 applicants in November 1937. If we assume that there were 10,028 gainful workers in the county in 1937, this would mean a registration of 5.8 percent. Considerable unemployment is indicated by this figure, even though consideration is given to the fact that some registrants were employed but were seeking better positions. Experience has shown that this would account for not more than ten percent of the active file.

TABLE 10. - PERCENTAGE DISTRIBUTION BY SEX OF GAINFUL WORKERS, AND UNEMPLOYMENT, 1930, THE ESTIMATED NUMBER OF GAINFUL WORKERS, AND THE ESTIMATED NUMBER OF TOTALLY UNEMPLOYED AND EMERGENCY WORKERS, ST. CHARLES COUNTY, MISSOURI, 1937

Item		Female
Gainful workers, 1930(1) Unemployed, Classes "A" and "B", 1930(2)	81.9	18.1
Estimated number of gainful workers, 1937	76.5	23.5
Estimated number of totally unemloyed and emergency workers, 1937	69.0	31.0

(1) Fifteenth Census of the United States, 1930, Popula-

tion, vol. III, table 20, p. 1368.

(2) Fifteenth Census of the United States, 1930, Unemployment Bulletin, Missouri Unemployment Returns by Classes, table 10, p. 20. See appendix, table 33, p. 63.

2. <u>Distribution by Sex</u>. The change in the relationship of unemployment between males and females is striking. (See table 10)

In 1930 females were 18.1 percent of all gainful workers but only 6.5 percent of the total unemployed. Their position in the labor market was much more favorable than that of males in 1930. By 1937 the relationship was reversed. The females constituted 31.0 percent of the unemployed in 1937 but only 23.5 percent of the estimated number of gainful workers in 1937. By 1937 the position of women had become less favorable than that of males.

Analysis of the active file of the Missouri State Employment Service in St. Charles County (at St. Charles) revealed a great predominance of men. Out of 585 persons registered as of November 1937, 504 or 86.2 percent were males and only 81 or 13.8 percent were females. Although they constituted 13.8 percent of the employment office registrants, females constitute 31.0 percent of the estimated number of totally unemployed and emergency workers. Elsewhere in this report it is shown that the number of females migrating exceeds the number of males. The Employment Service has a distinct under registration of females.

Distribution by Age Group. Data from the census of unemployment, 1937, when corrected for under enumeration by age group show the highest percentage of unemployment in the youngest age groups. For ages 15 to 19, 24.1 percent of the number of totally unemployed and emergency workers were accounted for. The percentages declined to age group 35 to 44 when it became 13.0 percent. It increased then to 14.0 percent for age group 45 to 54, when it declined again to 4.4 percent for age group 65 to 74. The proportion of females unemployed in the lowest age group exceeds that of men, but for all the age groups over 34, the proportion of females unemployed was less than that for men (see table 11). The age distribution of applicants registered in the St. Charles office of the Missouri State Employment Service, is somewhat different from that of the unemployment census. (see table 12) The highest proportion of unemployment as indicated by the applications in the active file occurred within the age groups 25 to 34. This age group contained 22.8 percent of the total applications in the active file. However, combining the three youngest age groups to a ten year age group for the purposes of comparison, we find that over 30 percent are between the ages of 15 and 24. Twenty nine percent of the men and 27 percent of the women are found in this age group. One explanation of the fact that more young people responded to the census of unemployment than registered in the local office of the employment service, was that the work

TABLE 11. - NUMBER AND PERCENT DISTRIBUTION OF THE ESTIMATED NUMBER OF TOTALLY UNEMPLOYED, AND EMERGENCY WORKERS, BY AGE GROUP, AND SEX, ST. CHARLES COUNTY, MISSOURI, NOVEMBER 1937

Age group	Total		Ma	Le	Female	
vec el orb	Number	Percent	Number	Percent	Number	Percent
Total	1095	100.0	756	100.0	339	100.0
15 to 19 20 to 24 25 to 34 35 to 44 45 to 54 55 to 64 65 to 74 Unknown	273 167 203 144 149 106 49	24.1 15.2 19.0 13.0 14.0 10.0 4.4 0.3	147 100 152 106 115 86 47	19.4 13.2 20.1 14.1 15.2 11.4 6.2 0.4	126 67 51 38 34 20 2	37.3 19.7 15.0 11.1 10.0 6.0 0.6 0.3

TABLE 12. - NUMBER AND PERCENT DISTRIBUTION OF APPLICATIONS IN ACTIVE FILE, BY SEX, AND AGE GROUP, MISSOURI STATE EMPLOYMENT SERVICE OFFICE, ST. CHARLES COUNTY, MISSOURI, NOVEMBER 1937(1)

Ago group	Total		Mal	Le	Female		
Age group	Number	Percent	Number	Percent	Number	Percent	
Total	585	100.0	504	100.0	81	100.0	
15 to 19 20 to 24 25 to 34 35 to 44 45 to 54 55 to 64 65 to 74 75 and over	66 111 134 114 96 43 20	11.3 19.0 22.8 19.5 16.4 7.4 3.4 0.2	52 95 122 96 82 37 20	10.3 18.8 24.3 19.0 16.3 7.3 4.0	14 16 12 18 14 6 0	17.3 19.8 14.8 22.2 17.3 7.4 0.0 1.2	

⁽¹⁾ From official tabulation sheets, Office of the Director, Missouri State Employment Service, Jefferson City, Missouri.

projects under way in the county required workers with experience, preference being given to heads of households. Feeling that their chances of securing such employment were remote, young persons failed to register at the employment office, or having once registered without securing employment, did not visit the office in sufficient frequency to keep their applications in the active file.

4. Distribution by Color. In 1930 the Negro population of St. Charles County was 4.4 percent of the total population, or 1,063 persons. It is estimated that the percentage of Negroes in 1940 will drop to 3.2 percent of the total population. This means that the Negro population does not represent a distinctive problem in St. Charles County. It is known that Negroes are subject to discrimination during periods of depression. They are the first workers to be released and the last to be rehired. However, the proportion of Negroes in the St. Charles labor market is so small that it has little effect upon the total problem.

TABLE 13. - PERCENT DISTRIBUTION OF TOTALLY UNEMPLOYED AND EMERGENCY WORKERS BY SEX AND OCCUPATIONAL GROUP, ST. CHARLES COUNTY, MISSOURI, NOVEMBER 1937

Occupational group	Total	Male	Female
All occupations	100.0	100.0	100.0
Professional persons Farmers, (owners and tenants) Other proprietors and managers, officials Clerks and kindred workers	1.8 1.7 •5 7.0	1.4 2.0 .6 4.8	3.7 .5 15.6
Skilled workers and foremen Semi-skilled workers Farm laborers Other laborers	14.8 20.6 9.2 23.7	18.5 19.7 11.4 29.2	24.3
Servant classes Occupations not reported New workers 15 to 24 years old 25 and over	4.8 2.5 10.4 3.0	2.4 7.2 2.0	21.1 2.8 22.9 7.3

Source: Census of Partial Employment, Unemployment, and Occupations, 1937, Final Report on Total and Partial Unemployment for Missouri, table 13, p. 43. For actual data see appendix, table 34, p. 64.

5. Distribution by Occupational Group. A percentage distribution of unemployed registrants in 1937 is presented in table 13, which reveals that the largest groups of unemployed males were "other laborers", "semi-skilled" and "skilled workers and foremen". Over 67 percent were in these three occupational groups. The largest occupational groups for females were "semi-skilled", "new workers", and "servant classes".

The fact that 23 percent of females 15 to 24 years of age were "new workers", and 7.3 percent, 25 and over were "new workers", apparently indicates that an increased proportion of women were seeking employment.

A distribution of the unemployed registrants by sex and occupational groups is presented in table 14.

TABLE 14. - PERCENT MALE AND FEMALE, TOTALLY UNEMPLOYED AND EMERGENCY WORKERS BY OCCUPATIONAL GROUP, ST. CHARLES COUNTY, MISSOURI, NOVEMBER 1937

Occupational group	Male	Female
All accupations	80.2	19.9
Professional persons Farmers (owners and tenants) Other proprietors, managers, officials Clerks and kindred workers Skilled workers and foremen	60.0 94.8 100.0 56.0 100.0	40.0 5.2 44.0
Semi-skilled workers Farm laborers Other laborers Servant classes Occupations not reported New workers 15 to 24 years old 25 and over	76.7 100.0 98.5 13.2 77.8 56.1 53.0	23.3 1.5 86.8 22.2 43.9 47.0

Source: Calculated from Census of Partial Employment, Unemployment, and Occupations, 1937, Final Report on Total and Partial Unemployment for Missouri, table 13, p. 43. For actual data see appendix, table 34, p. 64.

Table 14 reveals that women were most important in "servant classes", "new workers", and "professional persons".

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Males constituted all (or almost all) workers in "farm laborers", "other proprietors, managers and officials", "other laborers", and "farmers (owners and tenants)".

TABLE 15. - APPLICATIONS IN ACTIVE FILE BY SEX AND OCCUPATION, MISSOURI STATE EMPLOYMENT SERVICE OFFICE, ST. CHARLES COUNTY, MISSOURI, NOVEMBER 1937

Male				Female	
Occupation	Num- ber	Per- cent	Cumu- la- tive per- cent	Occupation	Num- ber
Total applications	504	100.0		Total applications	81
Laborers, construction Laborers, agriculture Laborers, factory	55 7 5 29 9 14 12 9 5 11 10 9 7 7 7 5 5	20.2 10.9 1.4 1.0 5.8 1.8 2.4 1.0 2.2 2.0 1.8 1.4 1.4 1.4 1.4 1.0 1.0	31.1 32.5 33.5 39.3 41.1 43.9 46.3 48.1 49.1 51.3 53.3 55.1 56.5 57.9 59.3 60.7 61.7	Housekeepers Maids, cooking Day workers Laundresses, washer- women Seamstresses Unassigned persons Stenographers, gen- eral Nurses, practical All other occupations	26 12 7 4 4 4 3 2 19

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6. Analysis of the Active File. The analysis of the active file of the St. Charles office of the Missouri State Employment Service, November 1937, shows that over 50 percent of the occupations of male applicants were of the nature demanded by the construction projects which were underway in the county. This suggests that the applicants classified themselves in accordance with their knowledge of employment opportunities. These data are shown in table 15.

7. <u>Unemployment by Place of Residence</u>. The place of residence of unemployed registrants in St. Charles County, 1937, is presented in table 16.

TABLE 16. - PLACE OF RESIDENCE AND SEX OF UNEMPLOYED REGISTRANTS, ST. CHARLES COUNTY, MISSOURI, NOVEMBER 1937

Item	Number	Percent
Total	1,101	100.0
Living on farm Not living on farm Not reported	148 941 12	13.4 85.5 1.1
Male	883	100.0
Living on farm Not living on farm Not reported	133 738 12	15.0 83.5 1.5
Female	218	100.0
Living on farm Not living on farm Not reported	15 203 	6.9 93.1

Source: Census of Partial Employment, Unemployment. and Occupations, 1937. Final Report on Total and Partial Unemployment for Missouri, table 9, p. 25. (Includes "totally unemployed" and "emergency workers".)

Of the total number unemployed, 85 percent lived in towns. Of the males, only 83.5 percent lived in towns. Whereas 93 percent of the females were urban dwellers. This indicates that in the rural sections of St. Charles County the unemployment problem was found chiefly in the small towns, yet

the fact that 13.4 percent of all unemployed were living on farms indicated a labor surplus existed among the rural areas as well. As would be expected, the unemployment among women was greater in the towns. This should not be interpreted as meaning that women on the farm were not facing unemployment and declining opportunities. A large part of the unemployed females in the towns come from the farms not because the towns offered abundant opportunity but because they saw less opportunity in the rural areas.

A comparison of the unemployed population in 1937 with the population of 1930, 15 to 74 years of age (for comparability with the census of unemployment) by place of residence is presented in table 17 which follows:

TABLE 17. - PERCENT DISTRIBUTION OF TOTALLY UNEMPLOYED AND EMERGENCY WORKERS 1937, AND POPULATION, 1930, BY PLACE OF RESIDENCE, ST. CHARLES COUNTY, MISSOURI

Place of residence	Totally unemployed and emergency workers 1937(1)	Population 15 to 74 1930(2)		
Total	100.0	100.0		
Living on farm. Not living on farm. Not reported	12.8 86.2 1.0	36.5 63.5		

(1) Census of Partial Employment, Unemployment, and Occupations, 1937, Final Report on Total and Partial Unemployment for Missouri, table 9, p. 25.

(2) Fifteenth Census of the United States, 1930, Population, vol. III, pt. I, table 14, p. 1353.

Table 17 reveals that whereas only 63.5 percent of the 1930 population was not living on farms, 85 percent of the 1937 unemployed registrants was in this category. This again shows that the unemployment problem was chiefly one of the urban areas, yet the amount of unemployment on the farms where people are commonly said "to at least make a living" was considerable.

8. Summary. Unemployment was not of great extent in St. Charles County in 1930, but it had assumed larger pro-

portions by 1937. Unemployment from 1934 to 1936 was largely alleviated by government work relief and public works projects. In 1937 unemployment became a greater problem than it was in 1930.

In 1930 unemployment was greater for males than for females. By 1937 the position of women in the labor market was less favorable than that of men.

The unemployed females in 1937 were younger than males. The largest number of both males and females unemployed were 15 to 24 years of age.

The proportion of colored persons in the county is very small, but unemployment among colored persons was probably greater than for whites.

The unemployed registrants in 1937 were largely an unskilled group. This fact was reflected also by applications in the active file of the Missouri State Employment Service office. Almost one-fourth of the unemployed females (15 to 24 years of age) for 1937 were "new workers". Only 7.3 percent of the males in the same age group were "new workers".

The towns had a much larger proportion of their workers unemployed in 1937 than did the rural areas. Nevertheless, the considerable number of unemployed registering themselves from farms indicated much insecurity on the farms.

E. Education

l. Trends in Enumeration. An enumeration of the school population, i.e. persons 6 to 18 years of age, is made annually by the county clerk in all Missouri counties. The report of this enumeration for years for which comparable data are available is presented in table 18, which reveals that there was a steady decline in the school population in keeping with the general decline in total population prior to 1920. From 1920 to 1923 there was a slight increase but by 1929 the decrease had again set in. By 1934 there was a sharp increase but this increase began to level off by 1937. For the entire period 1910 to 1937 there was a net decrease of 18.6 percent in persons of school age in the county.

The sharp increase in the early 1930's appears to be due partly to an influx of families as a result of the

TABLE 18. - ENUMERATION OF PERSONS OF SCHOOL AGE, 6 TO 18, ST. CHARLES COUNTY, MISSOURI, FOR SELECTED YEARS, 1910 TO 1937(1)

Year ending June 30	Number	Percent change (2) -18.62 +12.7 - 4.7 + .1 -14.0 - 2.1 - 3.3 - 3.3	
1910 to 1937 1937 1934 1929 1923 1920 1915 1914 1913	6,236 6,226 5,523 5,794 5,790 6,733 6,875 7,110		
1912 1911 1910	7,351 7,536 7,661	- 2.5 - 1.6	

- (1) Annual Reports, Department of Public Schools, State of Missouri.
- (2) Increase or decrease over previous year for which data available.

reopening of the car shops. Another factor was the migration of families from St. Louis to St. Charles County to lower their costs of living. The breadwinners of these families commute daily with their employment in the City of St. Louis or St. Louis County.

Local school authorities stated that there had been a slow but steady increase in the proportion of the school population attending school. This may be illustrated by data from the City of St. Charles.

The enumeration for the City of St. Charles shows that there was a general decline in school population from 1912 to about 1925. This probably reflects the decline in the population as shown from 1910 to 1920 in the federal census. After 1925 there has been a general increase in school population, reaching the peak in the academic year 1935 to 1936. Since that time there has been a slight decline. These data are presented in table 19.

The enrollment in St. Charles has shown a very con-

TABLE 19. - ENUMERATION AND NUMBER AND PERCENT ENROLLED IN THE PUBLIC SCHOOL SYSTEM OF ST. CHARLES CITY, MISSOURI, 1912 TO 1938

Year	Enum- era- tion	Total enrollment		High school enrollment		Grade school enrollment		Non- residents attending	
		Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	St. Charles schools	
1938-1939 1937-1938 1936-1937 1935-1936 1934-1935 1933-1934 1932-1933 1931-1932 1930-1931 1929-1930 1928-1929 1927-1928 1926-1927 1925-1926 1924-1925 1923-1924 1922-1923 1921-1922 1920-1921 1919-1920 1918-1919	2633 2692 2620 2606 2588 2597 2653 2570 2385 2287 2330	1359 1344 1324 1283 1283 1280 1254 1111 1083 1073 1055 1195 1150 1119 1121 997	51.0 49.2 49.0 49.2 49.5 48.3 41.9 42.1 49.4 	 488 476 470 426 395 382 313 327 318 296 326	18.1 17.5 16.3 15.3 14.7 11.8 12.7	871 868 854 857 - 885 838 798 756 755 759 819 - -	33.0 31.7 32.7 34.2 32.3 30.1 29.4 31.8 35.8	110 117 95 94 77 71 51 	
1917-1918	asph take	eraph haper		map	400 400	dan	atom capita		
1916-1917	400 000	-and plan		enter Mana	undo daria	donto			
1914-1915	2547	917	36.0		ande Ader		described	auto	
1913-1914	edition paydon		***		dellip cons	***		an-	
1912-1913	2671	907	34.0		enty-vites	agen	with order		

Source: From files of Steven Blackhurst, Superintendent of Schools, St. Charles, Missouri.

sistent rise from 1912 to the present time. The significance in increased enrollment is reflected by the fact that only 34 percent of all the school children in St. Charles were attending school in 1912, whereas by 1936 this figure had increased to 51 percent. (See table 19)

The decline in both school and total city population from 1910 to the early 1920's reflected, no doubt, declining economic opportunities which caused emigration from the county.

There was an expansion in manufacturing employment opportunities in the City of St. Charles during the 1920's. This was reflected by increased school and total population.

A second factor encouraging migration was the increase in high school enrollment. Local sources of information supported this conclusion. It is generally agreed that the higher the average education the more restless and dissatisfied are some of the graduates with the standards and modes of living in a rural county. Table 19 shows that regardless of the trend of school population there has been an increase in enrollment in St. Charles public schools, excepting for a very brief period from 1926 to 1930. There is no indication that this increased school attendance will diminish, in fact, there is every indication that even greater numbers are desiring to graduate from high school. In 1926, 14 percent of the school population was attending high school: by 1936 this had risen to 18 percent. In 1932 there were 51 non-resident rural students coming into St. Charles high school: by 1938 this had risen to 110. This trend in education will probably serve as a stimulant to migration.

The principal factor which may serve to diminish migration is the fact that St. Charles County following the national trend is entering a period of decreasing numbers of young people as a result of the decline in the birth rate.

It is yet too early to evaluate the importance of this factor, but in view of the trends in this direction it is probable that the school population will begin soon to decline, unless there is a sudden expansion in industrial activity in the county. In any case, the factors encouraging migration seem more than to balance those which during the next 10 or 20 years may make for less migration.

2. School Attendance. Students tend to drop out of school more rapidly in St. Charles County than in other counties of the state. A comparison of school attendance in St. Charles County and in the state in 1930 is shown in table 20.

In the age group 7 to 13, the proportion attending school in St. Charles County was nearly as high as that of the state. As one moves upward through the age groups attendance in St. Charles falls rapidly below the state average. In the age groups 14 to 15, and 16 to 17, St. Charles is

TABLE 20. - PERCENT OF POPULATION ATTENDING SCHOOL BY AGE GROUP, ST. CHARLES COUNTY AND THE STATE OF MISSOURI, 1930

Area	Age group					
Area	7 to 13	14 to 15	16 to 17	18 to 20		
St. Charles County	96.1	72.6	33.6	12.4		
State of Missouri	96.8	85.7	51.6	20.0		

Source: Fifteenth Census of the United States, 1930, Population, vol. III, pt. I, table 13, pp. 1339 and 1345.

fourth lowest and for the age group 18 to 20 is seventh lowest county out of 115 in the state.

The explanation is not to be found primarily in inferior school facilities or lower income in the county as compared with others. (6)

Field study revealed that one of the principal reasons for the low school attendance among the older youths was the lack of interest in secondary education among many farm families. A second reason for the low school attendance by youths of high school age was the proximity to the St. Louis Metropolitan Area which acquainted St. Charles youth with employment opportunities in the area and enabled them to seek those opportunities early. That the location of St. Charles County near St. Louis was an important factor in encouraging migration is shown by the fact that the five Missouri counties with close economic ties to St. Louis had school attendance below the state average for the clder youths. Several of the counties are "low income counties" and this, undoubtedly, was a further stimulant to migration.

⁽⁶⁾ Comparison of Missouri Counties by value of crops, livestock products per capita rural farm population, income tax receipts per capita, retail sales per capita, etc. made from data in United States Department of Commerce, Bureau of Foreign and Domestic Commerce, Consumer's Market Data Handbook, 1926, Market Research Series No. 16, pp. 151 to 157, pp. L306 to L308.

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F. Increased Mobility of Labor

In St. Charles County the increased mobility of labor has been one of the most significant changes in the last 30 years and probably no other single factor has so greatly affected the labor supply, unless it be the declining birth rate. Even the latter is, perhaps, due in part to the former. The change in the mobility of labor was stated by one farmer as follows:

"Today farm boys and girls can jump in a car and look for a job in St. Louis or some other town. They couldn't do that so easily 20 years ago.

"It's hard to keep good farm hands at a reasonable price. Too easy to get into town".

It is the opinion of many local persons that the increased mobility has added greatly, not only to the local (St. Charles County) labor market, but to the unemployment problem in St. Louis. A great many farm boys would have been content to stay on the farm 20 to 30 years ago. They didn't know about urban jobs and found it difficult to get them, if they did. Today, although the relative standard of living on the farm may even be lower than it was 20 to 30 years ago, these youth now have easy access to St. Louis by means of cheap automobiles. They come into St. Louis during peak seasons and remain there during the slack seasons. They are counted among the unemployed and they may be supported by relief. The increased mobility of the labor supply in the rural area surrounding St. Louis has contributed to the over crowding of the St. Louis labor market.

G. Changing Social Attitudes

It was the general opinion among the residents of St. Charles County that there has been a complete change in social attitudes during the past 25 years. Especially does this apply to the younger generation which is just now entering the labor market.

These young workers differ from the previous generation in their entire social outlook, in the standard of living which they expect, the sacrifices they will make for the future, the kinds of occupations they want, the hours

they want to work, the size of families they want to raise, and so on through the long list of personal reactions of the individual to his environment. These changes in social attitude have had an immediate and unmistakable effect upon the labor supply. A brief discussion is, therefore, justified at this point.

l. <u>Rural vs. Urban Life</u>. There seems to be no lessening of the desire of a large number of St. Charles County rural youth to leave the farm. If anything, the desire to get away has increased in recent years.

A youth described his experiences thus:

"I scoured this county for six months and couldn't find a decent job. The only work available was shocking corn at 15 cents a shock. But that lasts only a few weeks and you break your back all day long for a dollar and a half. I'm going into the city to lock for a job".

The objections to farming voiced by high school students interviewed ran something as follows: "Hours too long"; "Nothing to do but work and sleep"; "No regular cash income"; "Can't buy what you want"; "You have to work too hard"; "It's too lonely"; "You don't get paid anything for what you do". One farm boy expressed himself as follows:

"I'm in here attending high school from a farm a few miles out. There are three boys and one sister in our family and there simply isn't enough for us on the farm. My two older brothers left a few years ago but are back again after losing their jobs on the West Coast.

"I'm getting out of school here next year, and I'm leaving the farm. I don't know where I'm going yet, but there sure ain't nothin' for me back on the farm".

2. Standards of Living. Regardless of whether they stay on the farm or move to a rural town or into a large urban center, there seems to be a united front against what is called "sacrifice living". One banker stated the problem as follows:

"It was the custom around here a generation or two ago for young couples

to save all they could in order to acquire the land they cultivated.

"They don't save like that today. They'd rather spend their money for automobiles and radios. Saving is a thing of the past for most of them".

Many young farmers, some of them paying for their farms, admitted that neither they nor anyone else in their community, would engage in the so-called "sacrifice farming". This term is applied to the methods of farming employed by most couples a few generations ago who wanted to acquire ownership of land. One of the community's leading bankers had this technique in mind when he made the preceding quotation.

The farmers testify to the fact that now the young housewives are not putting up canned foods, as in previous generations. It is too much work. They are not baking bread, as they did fifty years ago: they buy it in town. Fewer and fewer farmers are butchering their own meats. More and more of them want to buy their meats in town. Many farmers are now even buying their butter and occasionally eggs for their own use. They want to concentrate on one cash crop and to buy everything in town.

There is a constant and never-ending effort being made to do away with household drudgery, to get into town more often, to visit relatives more, etc. Farmers are giving up saving and investing in order that they may have more immediate enjoyments.

This seemingly irresistable effort to raise the present standards of living has had an important affect upon the labor supply. Young workers are very ready to leave the farm for any kind of factory work. The farm youth have determined upon a definite minimum standard of living. To acquire ownership of land would involve giving up this standard. The present would have to be sacrificed for the future. This they are unwilling to do.

It is very clear that most of these young people will never own farms if they continue to spend their incomes for immediate enjoyment. There is every reason to believe that they are going to insist on raising their standards of living and will care less about the so-called "sacrifice farming". This makes the population on the farms more restless. When farm prices fall it put many of them to the necessity for seeking relief. They have few savings in reserve.

Changing social attitudes are also reflected in the decline in the size of families. This curtailment of family size in rural areas may in time bring the population more in accord with employment opportunities.

The desire for higher standards is reflected by many cases in which rural young people migrate to the city and accept employment at extremely low wages. When questioned, they answer that, while they realize their wages are low, they are retter than no cash income at all, which is the lot of many young people on the farm. The city provides increased opportunities for companionship, new interests, and the stimulation for achievement. Thirty years ago, with but a meager education, farm youth would not so readily have developed interests leading them away from the farm. They would have been content to remain there and to accept the opportunities available and to complete their adjustments to the rural community.

3. Causes of Change in Social Attitudes. Two of the principal factors explaining the change in social attitudes are the automobile (together with hard roads) and higher education. The automobile has acquainted farm youth with the cities, and with such urban forms of entertainment as the movies. Higher education has broadened their interests and their outlook. It has acquainted them with many different kinds of occupations. It has stimulated imitation of urban life with its alleged higher living standards. They are im pressed by "success stories" and tend to ignore the typical situation which confronts the rural youth who migrates to the city in search of employment.

III. THE DEMAND FOR LABOR

A. Trends of Agricultural Employment

l. Types of Farming. From the very beginning of its settlement grain farming took on importance in St. Charles County. Much of the soil is excellent for growing wheat and climatic factors are especially favorable to the production of soft red winter wheat. (1) Up until 1919 grain farming, with winter wheat as the most important cash grain crop, was procticed on probably 70 percent of this county's farms. (2)

Beginning with agricultural depression of 1920 to 1921 the trend has been away from grain farming and toward the grass, pasture, livestock, type of farm. Today close to 70 percent of the farms are of the livestock, dairy, and general type of farm. (2) This change from grain farming to the grass, pasture, livestock, farm came about in several ways.

For the period 1900 to 1935, total acres in crops was reduced 25 percent. The acreage in corn fell off 21 percent during this period. The acreage sown in oats, while never a big item in this county fell off 77 percent. Wheat acreage from 1880 up to the close of the World War increased steadily but since that time has been reduced about 30 percent. (4)

The expansion of the grass, pasture, livestock, type of farm coincides with the increase of dairy cattle in this county. (5) More favorable prices for dairy products, and greater accessibility of most of the farms to the St. Louis market due to the development of modern transportation, have brought about expansion in dairying. Declining fertility of the land has also encouraged the shift from cash-grain farming.

From the standpoint of climate and soil, much of this county is well adapted to the growing of fruits, especially apples, but the number of apple trees for the period

(2) From estimate of local County Agricultural Agent.

(3) See appendix, table 35, p. 65.

(4) See appendix, table 36, p. 66.

(5) See appendix, table 37, p. 67.

⁽¹⁾ United States Department of Agriculture, Bureau of Soils, Soil Survey of the O'Fallon Area, Missouri and Illinois, by Elmer O. Fippin and J. A. Drake, 1905, p. 31.

1900 to 1935 was reduced 72 percent. (6) The family size orchard is the prevailing unit. Apples, peaches and cherries are grown. Taking the county as a whole, farm labor requirements over the years have been markedly reduced. Increased efficiency in the performance of most farm tasks is responsible for this. The shift from grain farming of the earlier period to grass, pasture, livestock, was accomplished by increased efficiency in the latter. Much of the processing formerly done on the dairy farm has been passed on to the creamery, ice cream, or dairy plant. (7) The net result has been to cut the demand for labor lower than it would have been had this shift in types of farming not been accompanied by improved practices.

2. Mechanization. The United States Census of Agriculture in 1925 showed 396 tractors, in St. Charles County. (8) The Census of 1930 showed 618 tractors. (9)

Data published by the Farm Journal show 1197 tractors in the county by the end of 1937. (10) It is estimated that by the fall of 1938 St. Charles County will have 1316 tractors. This figure compared to that of 1925 shows a gain of 232 percent for the 14-year period, or an increase of 65 tractors per year. In a general way, it can be said that for 1925, 20 percent of the farms had tractors. Today, approximately 65 percent of the farms are so equipped.

Because of the fairly level topography of the farms in the alluvial bottoms probably 60 percent of all tractors in the county are concentrated in this area. According to one local implement man, many of these farms have more than one tractor. The high productivity of these bottom farms and their adaptability to power farming are factors localizing in cash grain farms in this part of the county. Indications are that within the next five years, nearly all of these farms will be tractor-operated. In this connection, the "row type" tractor, rubber tire mounted, will, no doubt, play an important part.

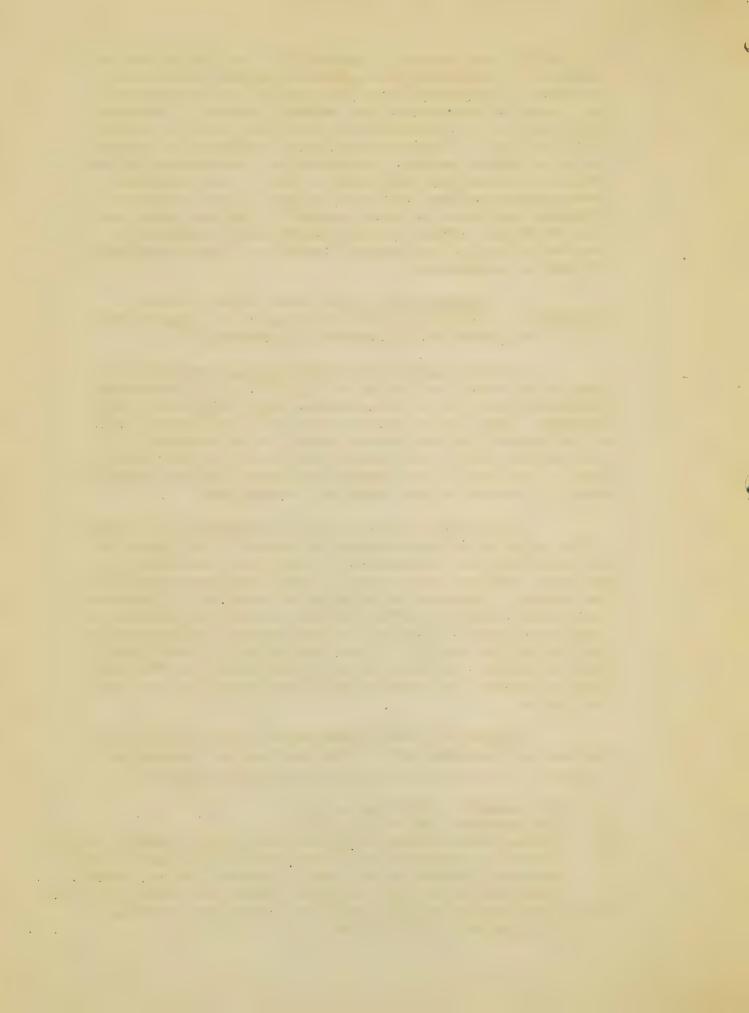
Estimates of the displacement of labor by the tractor are not available for St. Charles County. Studies in

⁽⁶⁾ See appendix, table 38. p. 68. (7)

See appendix, table 39, p. 69.
United States Census of Agriculture, 1925, table II, p.930. (8)

Fifteenth Census of the United States, 1930, Agriculture, (9)Missouri, Statistics by Counties, Second Series, Selected Crops and Livestock, Mortgages, Taxes, etc. table XII. p.52.

⁽¹⁰⁾ Farm Journal Inc., An Analysis of Tractors on Farms. Philadelphia, 1937, p. 19.



other Missouri Counties indicate that the displacement has been very great. (11) For example, cases were cited in which by the use of a tractor one man doubled the amount of land cultivated with only slight increase in the amount of time expended.

The introduction within recent years of a small type combine harvester adaptable to such grain farms as prevail in these bottoms is making for a rapid increase in this type of equipment. Estimates put the number of all types of these combines in use at 100. The manufacturer of one of these machines claims that it will effectively harvest 84 different crops. It is estimated that the combine probably reduces the labor requirements in harvesting wheat in this area more than half.

The acreage in corn on the bottom farms of this county is quite extensive. The introduction of mechanical corn pickers, however, is going forward rather slowly. This is due to the custom of hiring local and migrant labor in the fall to cut corn by hand at prices ranging from 15 cents to 30 cents per shock. These shocks are placed in regular rows on the field and the land is seeded to winter wheat.

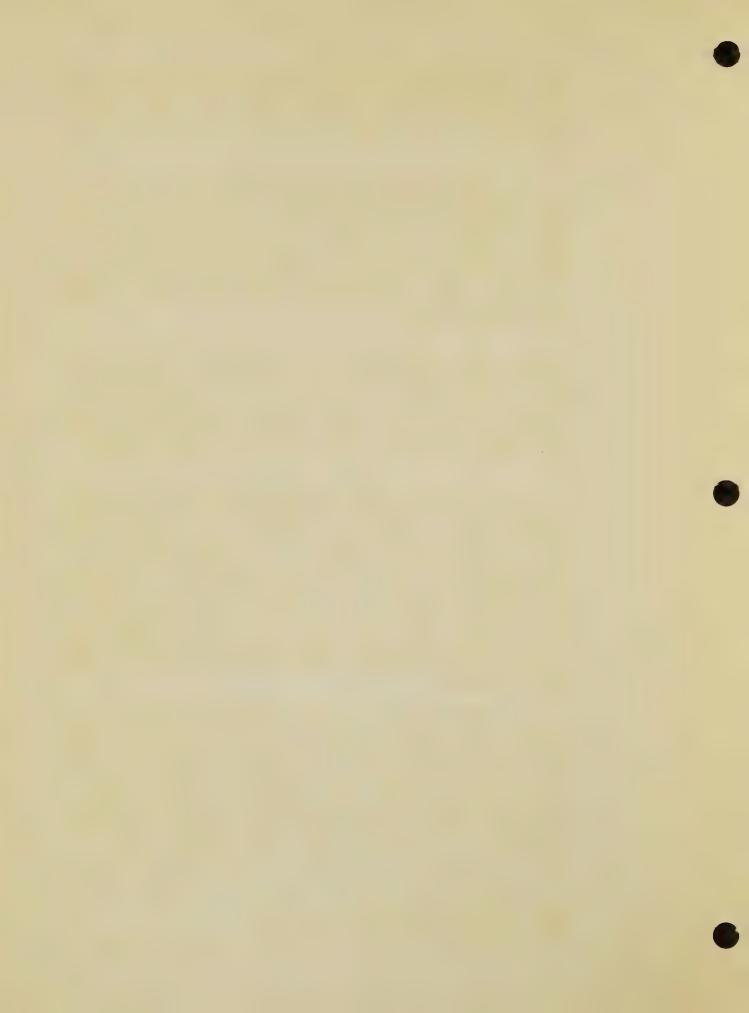
Plowing is the most laborious, time-consuming job on the farm. Other operations in preparing the seed bed go forward much more quickly and rapidly. Time studies made in other Missouri counties show that an operator plowing with a 10-20 tractor will turn 8.08 acres of ground in a 10-hour day, compared to 4.03 acres with 4 horses. (12) In disking plowed land, an operator of a 10-20 tractor will prepare 23.8 acres in a 10-hour day, compared to 8.6 acres with 4 horses. These time studies, while not directly applicable to St. Charles County as a whole, do show the downward trend in farm labor requirements resulting from the use of power-drawn equipment.

Wheat acreage is about 38 percent of total crop acreage in the county. No studies of the effects of mechanization on labor requirements in grain production have been made in St. Charles County. A general indication of these effects may be obtained from studies in the neighboring state of Illinois. (13) In one county, from 1914 to 1937, man hours required for winter wheat were reduced 80 percent. A reduction of 72 percent in man hours required in the production of soy-beans, took place in one county, 1922 to

⁽¹¹⁾ See appendix, table 40, p. 70.

⁽¹²⁾ See appendix, table 41, p. 71.

⁽¹³⁾ See appendix, tables 42 through 45, pp. 72 through 75.



1937. Man hours were reduced about 10 percent 1913 to 1922 in one county, and 37.3 percent 1920 to 1937 in another county in the production of corn.

The counties above referred to were of very high productivity. A reduction of man hours probably did not take place in St. Charles County to the same degree but the general trend is unquestionably indicated.

Power farming seems more attractive to the farm youth of this vicinity than farming in the traditional manner. The command over power-driven units seems to inflate the operator's ego and to make him feel that he is being an up-to-date farmer. In cases where this attitude prevails, it acts as a check on migration.

3. Number of Farms. There was a consistent reduction in the number of farms in St. Charles County between 1900 and 1930, the earlier figure being 2297; and the latter figure 2021. A gain of 6 farms by 1935 brought the total to 2027. The net reduction for the 25 year period was 270 farms or 11.8 percent. (14)

The total acreage in farms in 1900 was 300,171 acres. Both 1910 and 1920 were slightly in excess of this figure, but since the latter date total acreage seems to have stabilized around 290,000 acres.

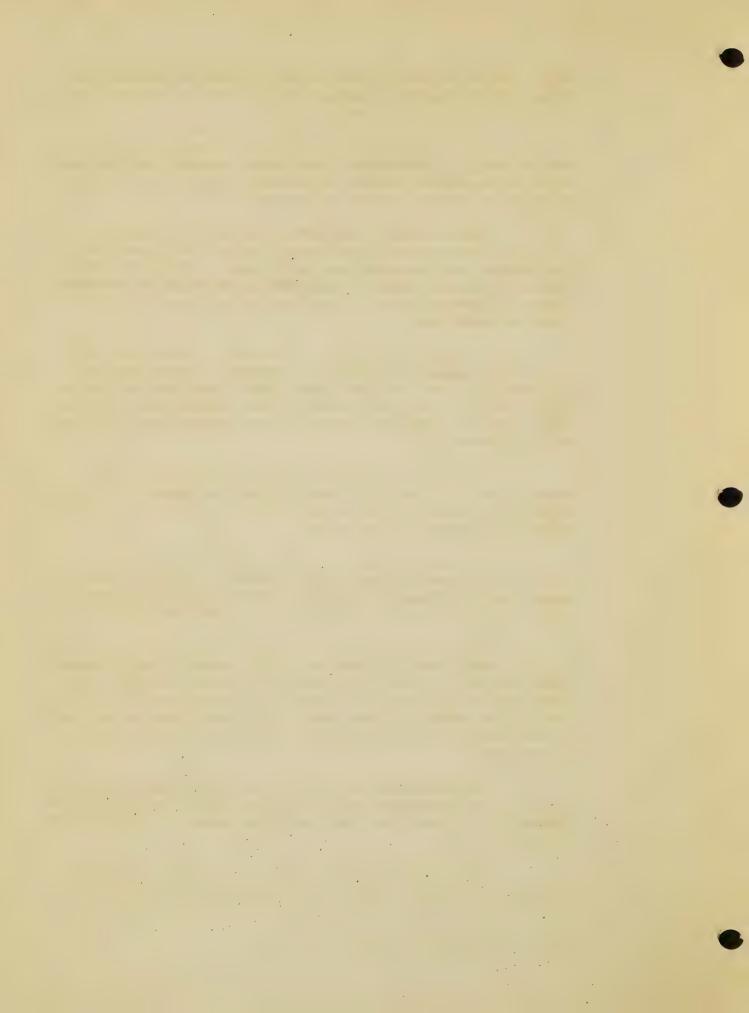
The total acreage in crops in 1900 was 220,491 acres. The years 1910 and 1920 witnessed a slight increase above the 1900 figure but for the 10-year period 1925 to 1935, total crop acreage has levelled off at about 165,000 acres.

From 1910 to 1925 there was a decrease in the average size farm from 143.3 acres to 137.0 acres. This downward trend was then reversed. By 1930 the average size was 140.7 acres and by 1935 was 144.7 acres. The reduction of 11.8 percent in the number of farms up to 1935 along with an increase in the average size of farm have made for decreasing labor requirements.

Informed sources in the county point out that in recent years city workers are developing small acreage homesites. However, no increase in farm labor requirements can be looked for here.

An expansion in the number of country estates by wealthy men from St. Louis is taking place and this may be a

⁽¹⁴⁾ See appendix, table 41, p. 71.



factor in the future for increasing certain labor requirements.

4. Effects of Declining Fertility. Approximately two-thirds of the rolling upland surface has lost one-half of its original fertile soil. (15) Of the upland area about three-fourths is subject to moderate or serious gully erosions and sheet erosions. From 10,000 to 15,000 acres of this upland area has suffered from the effects of gullying to the extent that it is now marginal for crops.

In the Mississippi river bottom area north and northwest of St. Charles are located scattered but more or less extensive areas of flat, heavy, wet land, much of it covered with a tall, wiry grass. Large areas of this land offer a haven for water fowl.

Overflows are frequent and the run-off of surplus water very slow. Much of this area is given over to recreational use. Farms are scattered and many farmers depend on part time employment from the hunting and fishing clubs which dot the area. Expansion of agriculture is dependent upon drainage of this area, which is costly.

B. Trends of Non-Agricultural Employment

A record of all gainful non-agricultural workers in St. Charles County in the first quarter of 1938(16) shows that 80 percent were employed in manufacturing pursuits, the remaining 20 percent being distributed rather widely through retail trade and service industries.(16) Therefore, in our study of non-agricultural employment opportunities in St. Charles County, we shall confine ourselves to the study of manufacturing workers.

The first five ranking manufacturing industries in 1923 are shown in table 21.

(15) L. D. Baver, Soil Erosion in Missouri, University of Missouri, Agricultural Experiment Station Bulletin 349, April 1935.

(16) From unpublished data furnished by Missouri Unemployment Compensation Commission, Jefferson City, Missouri.

TABLE 21. - NUMBER AND PERCENT DISTRIBUTION OF MANUFACTURING WORKERS, ST. CHARLES COUNTY, MISSOURI, 1923

Industry	Manufacturing workers			
Industry	Number	Percent		
All manufactures	2109	100.0		
Car shops Boots, shoes Foundry Sand, gravel Printing, publishing	992 854 103 36 27	47.0 40.5 4.9 1.7 1.3		
All others	97	4.6		

Source: 44th Annual Report, Bureau of Labor Statistics (Labor and Industrial Inspection Department) State of Missouri, p. 167

TABLE 22. - NUMBER AND PERCENT DISTRIBUTION OF MANUFACTURING WORKERS, ST. CHARLES COUNTY, MISSOURI, 1931

Industry	Manufacturing workers			
Industry	Number	Percent		
All manufactures Boots, shoes Sand, gravel Bakeries Creamery Ice All others	892 817 33 12 11 6	100.0 91.6 3.7 1.3 1.2 .7		

Source: 52nd Annual Report, Bureau of Labor Statistics (Labor and Industrial Inspection Department) State of Missouri, p. 167

, The state of the s The five industries shown in table 21, in 1923 employed almost 96 percent of all the manufacturing workers, and most of them were concentrated in two industries - car shops and boots and shoes. Records of employment for 1926, 1928, and 1930, show that by 1928, boots and shoes became the most important industry and that by 1930, car shops were reduced to a very low level of employment.

The first five ranking industries in 1931 are shown in table 22. By 1931, boots and shoes had become the leading industry in the county. Although 1931 is considered a depressed year, this industry employed almost as many workers as in previous years. Car shops were completely shut down.

Table 22 shows also how dependent upon boot and shoe industry were St. Charles workers in 1931 for employment opportunities. About 92 percent of manufacturing workers were employed in this industry.

TABLE 23. - NUMBER AND PERCENT DISTRIBUTION OF WORKERS COVERED BY THE MISSOURI UNEMPLOYMENT COMPENSATION ACT, FOR SELECTED INDUSTRIES, ST. CHARLES COUNTY, MISSOURI, 1938

Industry group	Number	Percent of all covered workers	Percent of all workers in manufac- tures
All covered workers	2,605	100.0	
Covered workers in manufactures Boots, shoes Car manufacture Quarries (sand, gravel) Stove manufactures Garments Creameries Other covered workers in manufactures	2,059 1,193 545 119 50 43 41	79.0 45.7 20.9 4.6 1.9 1.7 1.6	100.0 58.0 26.5 5.8 2.4 2.0 2.0
All other covered workers	546	21.0	-

Source: Unpublished data furnished by the Missouri Unemployment Compensation Commission, Jefferson City, Missouri.

This table shows not only the percentage of all manufacturing workers employed in the first five industries, but the percentage of all workers in St. Charles County employed in these five industries.

Making allowance for the fact that tables 21 and 22 are not exactly comparable with table 23(17), it appears that the boot and shoe industry, 1931 to 1938, kept its position as first ranking in St. Charles County, but there was a distinct recovery in employment in the car shops. (18) These two industries employed 84 percent of all manufacturing workers, and almost 70 percent of all non-agricultural workers in the county.

During the 15-year period, 1923 to 1938, it appears that the long run trend of employment opportunities in St. Charles County in non-agricultural pursuits remained about stationary. Slight increases in boot and shoe industries were offset by irregular employment in car shops.

Field study revealed that the car shop industry of St. Charles County is an "overflow" plant. It has experienced increasing difficulty in competing against other car shops in the country. From 1929 to 1933 it was almost completely shut down. There was a brief revival in 1936 and the early part of 1938, but by September 1938, the plant was again closed and only a skeleton maintenance staff retained. In August 1939 it is expected that 18 months work for about 500 men will be provided.

The shoe industry gives every indication of continuing at its present capacity with the possibility of slight expansion. Since this is the only non-agriculture industry in the county offering considerable employment to young workers, it is very unlikely that it can absorb more than a small percentage of the youth of the county who annually come of working age.

⁽¹⁷⁾ The reports of the State of Missouri Labor and Industrial Inspection Department are less complete than the data furnished by the Missouri Unemployment Compensation Commission. The data compiled by the former are the results of voluntary reporting by private concerns. Insofar as limited field study could show, however, the data used herein reflects the general picture.

⁽¹⁸⁾ In October 1938, the car shops were almost completely shut down.

5

C. Federal Government Expenditures

During the five-year period, March 4, 1933, through June 30, 1938, federal expenditures in St. Charles County amounted to \$6,395,604. This represented an expenditure of \$262.61 per capita (1930 population). Federal expenditure per capita (1930 population) for the state amounted to \$206.31.

It is impossible to estimate the effects of the distribution of this federal money on the economic life of St. Charles County. It may be well to note in passing, however, the various types of loans and grants made through numerous agencies. Expenditures and grants by dispensing agencies are presented in table 24.

TABLE 24. - FEDERAL GOVERNMENT EXPENDITURES, ST. CHARLES COUNTY, MISSOURI, MARCH 4, 1933 THROUGH JUNE 30, 1938

Estimated total of federal benefits Number of families (1930 census) Average federal benefits per family		\$	6,395,604 5,948 1,075
Reconstruction Finance Corp. (from			
February 2, 1932)	Loans	-	134,781
Federal Land Bank and Commissioner (1)	Loans	*****	368,000
Emergency Crop and Feed(1)	Loans		5,850
Drought Relief, 1934-35 (Program com-			
pleted)	Loans	and a	1,256
Farm Security Admn Rehabilitation	Loans		101,684
Home Owners' Loan Corporation (Com-			
pleted)	Loans	-	228,010
Public Works Admn., Non-Federal Pro-			
jects	Loan Allotments	_	34,200
Rural Electrification Administration	Loan Allotments		
(Total project cost divided by			
counties participating)		-	
	. repayable	\$	873,781
10001	. Tepayabre	ф	017,101

Source: National Emergency Council, R. K. Ryland, State Director, New Federal Building, St. Louis, Missouri. In addition, modernization, repair notes and mortgages accepted, mortgages for insurance, amount to \$120,113, in the same period.

(1) These agencies are reporting for a period starting prior to March 4, 1933.

TABLE 24. - FEDERAL GOVERNMENT EXPENDITURES, ST. CHARLES COUNTY, MISSOURI, MARCH 4, 1933 THROUGH JUNE 30, 1938 - Continued

Federal Emergency Relief Administration (Completed) Civil Works Administration (Completed) A.A.A. Rental and Benefit(Completed)(1)	Obligations Payments	\$	126,306 87,070 611,643
A.A.A. 1936 Conservation Program (Completed) Pleted) Farm Security Admn Rural Rehabili-	Payments	-	139,840
tation	Grants		29,045
Farm Security Admn Farm Debt Adjustment(2) Public Works Admn., Non-Federal Pro-	Reduction	ga-m	20,070
jects	Grant Allotment	S-	145,148
Public Works Admn., Federal Projects to October 1	Allotments	***	1880 WAR 1980
Social Security Board (Recipients of Old-Age Assistance, Aid to Dependent Children)	Obligations		69,984
Total	non-repayable	\$	5,521,823
Total Federal Benefits to St.	Charles County	\$	6,395,604
		=	

(1) These agencies are reporting for a period starting prior to March 4, 1933.

(2) Farm debt reduction and Federal Housing Administration insurance do not constitute federal expenditure. They are "Benefits". State-wide and district-wide projects of the WPA, PWA, and FSA are not included, nor are expenditures of state and local bodies in conjunction with such agencies as the PWA, WPA, SSB, FERA, and CWA.

Note: Expenditure of the Civilian Conservation Corps; Bureau of Public Roads and 1937 Conservation Payments; Bonus Payments; and loans of the Commodity Credit Corp., Disaster Loan Corp., and the Production Credit Associations under the FCA are not obtainable upon a county basis.

The most important loans were through the Federal Land Bank and Home Owners' Loan Corporation. The most important grants and expenditures were through the Public Works Administration, Agricultural Adjustment Administration Benefit Payments, and the Works Progress Administration.

The young workers of the county were particularly affected by the employment or assistance from the National Youth Administration, the Civilian Conservation Corps, and the Soil Conservation Service. Entire families have felt the influence of the Farm Credit Administration, the Farm Security Administration, and others.

The general effect of federal monies was to increase the security of the workers in the county. Current conditions were somewhat stabilized and migration was temporarily checked among some parts of the population.

D. Shrinkage of Agricultural Credit

Sources of credit available to young farmers of a generation ago have dried up insofar as the beginners of today are concerned. Many of those who started farming in an earlier day could secure ample funds on their signature from many different sources. Character or signature loans, probably by a government agency, are needed to give young married farmers a start. The big farm mortgage concerns, such as the Federal Land Bank or insurance companies, do not touch this field. Production and credit associations of the Farm Credit Administration can do little to help the beginner of today, unless he be possessed of a fair supply of capital. The tenant purchase program of the Farm Security Administration seems to be a way cut of this difficulty but this agency is so limited in funds and personnel that for the time being at least there seems little hope that the young farmer of St. Charles County can avail himself of this service.

IV. CONCLUSIONS

A. Agricultural Employment

The opportunities for St. Charles County youth to engage in agriculture have declined steadily in the past few decades. Poor farm management in some areas has led to the destruction of soil fertility. Erosion has removed a large proportion of the top soil and the productivity of the soil per acre has fallen off. Low farm prices have resulted in low farm income. These factors, along with others, have in turn resulted in a drying up of former sources of agricultural credit. It has become increasingly difficult for young workers without means to acquire farms of their own.

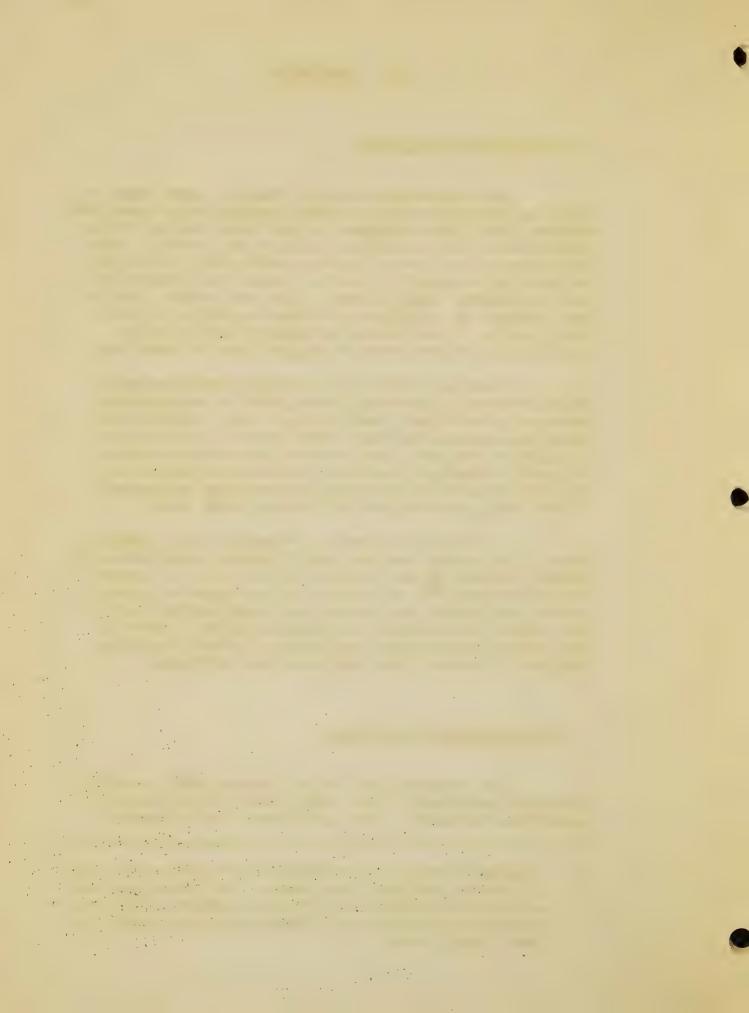
Increased efficiency in farming operations and a rapid increase in livestock farming, with a proportionate decrease in cash grain farming have not only reduced total labor requirements, but have spread demand for labor over 12 months of the year, thus reducing the seasonal demand. The rapid increase in the use of mechanical equipment on the farms since 1925 has reduced the man-hour requirements of most crop production on St. Charles County farms.

A reduction of about 11.8 percent in the number of farms of the county over the last 35 years, along with an 11 percent increase in the average size of farm, have lowered farm labor needs. (1) An increase in the number of country estates and resorts has created only slight demands for labor. While opportunities have been declining in spite of the decrease in the rural population, the farm population has greatly exceeded farm employment possibilities.

B. Non-Agricultural Employment

The opportunities for St. Charles youth to obtain industrial employment in the county have been extremely irregular and inadequate. One shoe company in St. Charles

⁽¹⁾ A slight increase in the number of farms since 1930 has not checked declining labor needs. The latter increase was due to the migration of factory workers in the county's factory towns out to a few acres in the county, to lower living costs.



has expanded slowly but only to the extent of employing a small part of the surplus labor. The railroad car shops have employed as high as 500 workers, but complete shutdowns have been frequent. In the Fall of 1938, the factory was closed and the labor force scattered. The outlook for re-opening the plant was not encouraging, but it is anticipated that by August 1939 the plant will employ about 500 workers for some 18 months. The labor surplus is likely to be as large, if not larger in relation to industrial employment opportunities in the future as it has been in the past.

C. <u>Unemployment 1930 to 1937</u>

Unemployment was not great in 1930 but it became so in the following years. In 1937 an estimate based on available census data indicated that 10.9 percent of the gainful workers were unemployed. Registrants at the Missouri State Employment Office, 1937, constituted about 5.8 percent of estimated gainful workers.

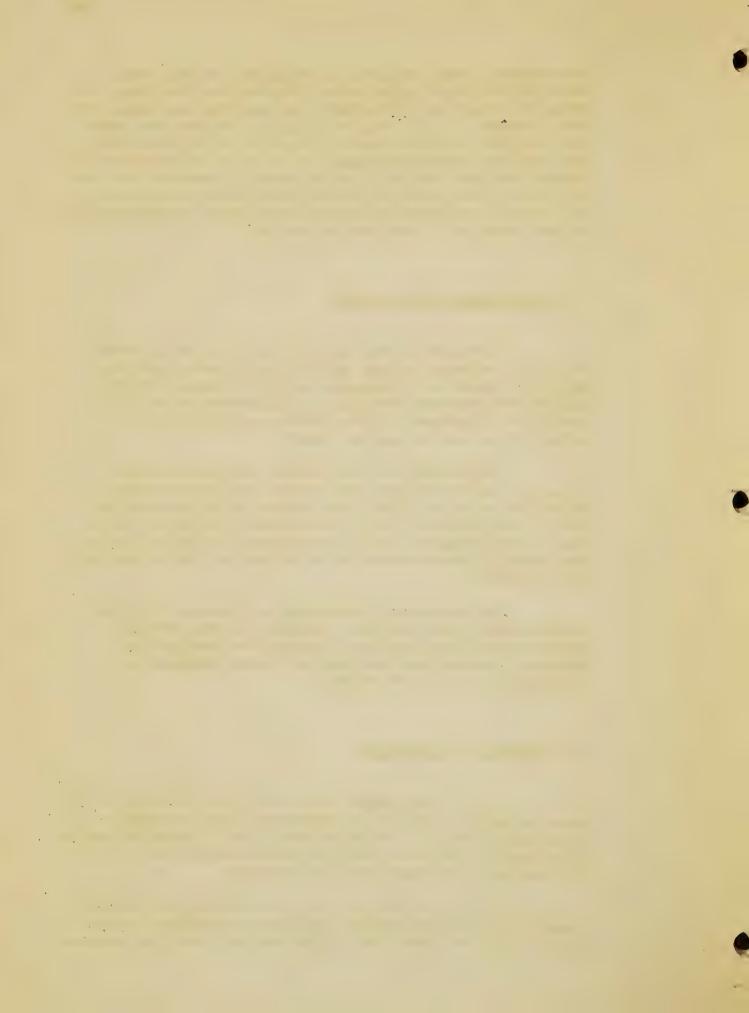
Proportionately unemployment was more serious among the males than females in 1930, but greater among females than males in 1937. This latter is due probably in part to the increased proportion of women trying to obtain gainful employment in 1937, as contrasted to 1930. Females were greatly underrepresented in the active file of the Employment Office.

The unemployed registrants of November 1937, were predominently young workers. Unemployment was probably greater proportionately among colored than among white workers. Unemployment was greatest among unskilled and semi-skilled, and "new" workers.

D. Estimates of Migration

Lack of employment opportunities in relation to the labor supply has resulted in emigration from the county. It is estimated that 710 native whites, 10 to 19 years of age in 1920 migrated from the county during the period 1920 to 1930. Of these 342 were males, and 368, females.

In an agricultural area of declining productivity, young girls of large families see less opportunity for employment than do farm boys. Migration was therefore, greater



for females than for males. This is reflected, by the fact that in 1930 there were 102.3 males for every 100 females in the population of St. Charles County which was in contrast to the City of St. Louis, where there were 95.6 males to every 100 females. Sex ratio figures show successive waves of female migrants from farms to rural towns, to urban places, and to the City of St. Louis.

l. The Influence of Social Factors. The past migration of rural youths out of St. Charles County was not only a result of economic forces, but of social factors as well. It is generally agreed that increased secondary education has been a stimulant to migration under a situation in which the supply exceeded the demand. Increased education broadened the horizon of rural youth as to types and places of employment, created new fields of interest and acquainted the youth with ways and means of seeking what appeared to be greater employment opportunities. Such urban institutions as the movies and pictorial magazines coupled with the cheapening of the automobile, aided migration.

One factory executive stated the effects of cheap automobile transportation as follows:

"The automobile has revolutionized the rural labor market. Farm boys and girls come to our factory today who would never have done so 20 years ago. They are only 30 minutes from St. Louis. If they can't get work here, they're off to St. Louis. In the past they would have been content to stay on the farm".

A noticeable social development has been the disregard for "sacrifice living" of past generations. Emphasis now is placed on urban standards of living. The rural youth of St. Charles County today will no longer deny themselves the variety of social contacts which were deemed unnecessary by their parents. They desire cash incomes which will enable them to provide themselves with the comforts of life which are available to the residents of towns and cities. The so-called "compensating features" of farm life, such as an abundance of fresh air and sunshine, ample supply of good, fresh, food for immediate table use, and canning purposes, closeness to nature and management of one's own affairs, all of these may be very much worth while but appear to be of lesser interest if the comforts of urban life are denied. The entrance of an increasing number of women into gainful employment reflects the desire to raise present standards.

2. The Influence of the Schools. The number of

persons of school age, 6 to 18, in St. Charles County declined until 1920. Since then the number has increased slowly. This reflects the growth of the factory towns, for the school population in the rural districts has declined.

The proportion of school population attending school has increased steadily which has made for greater migration, as discussed elsewhere in this Conclusions.

St. Charles County has a lower proportion of its youth between 14 and 18 attending school than all but a very few counties in the state. This is traceable probably to two factors: (1) The lack of interest in secondary education of a large sector of the farm population; (2) proximity to the St. Louis Metropolitan Area, which has afforded relatively greater employment opportunities.

The curricula of the schools, especially the secondary schools, reflects the desire of the youth to educate themselves for non-agricultural types of employment. Courses in mechanical trades are popular with boys. Courses in business, bookkeeping, accounting, letter writing, etc. are popular with both boys and girls. The educational curricula, undoubtedly, tends to educate farm youth away from the farm. In the light of employment opportunities in the past, this cannot be condemned. Improvements of roads, and the cheapness of the automobile, have provided an avenue of escape from what was considered an environment of few opportunities. Four year high schools are located in towns of the county with one exception. The rural youth who attend these schools find additional stimuli to arouse their desire to leave the farm.

- 3. The Influence of Federal Government Expenditures. Federal Government expenditures through its various channels since 1933, have tended to check migration in that they have given some degree of security to marginal urban and farm families.
- 4. Probable Future Migration. Because of the lack of local data, it is extremely difficult to arrive at an estimate of the probable future relationship between population in the county and economic opportunities. However, it seems reasonable to conclude from field study, that St. Charles County will continue to have a surplus population and that the Industrial Area of St. Louis will probably continue to offer relatively greater economic opportunities to many of its rural youth than could St. Charles County.

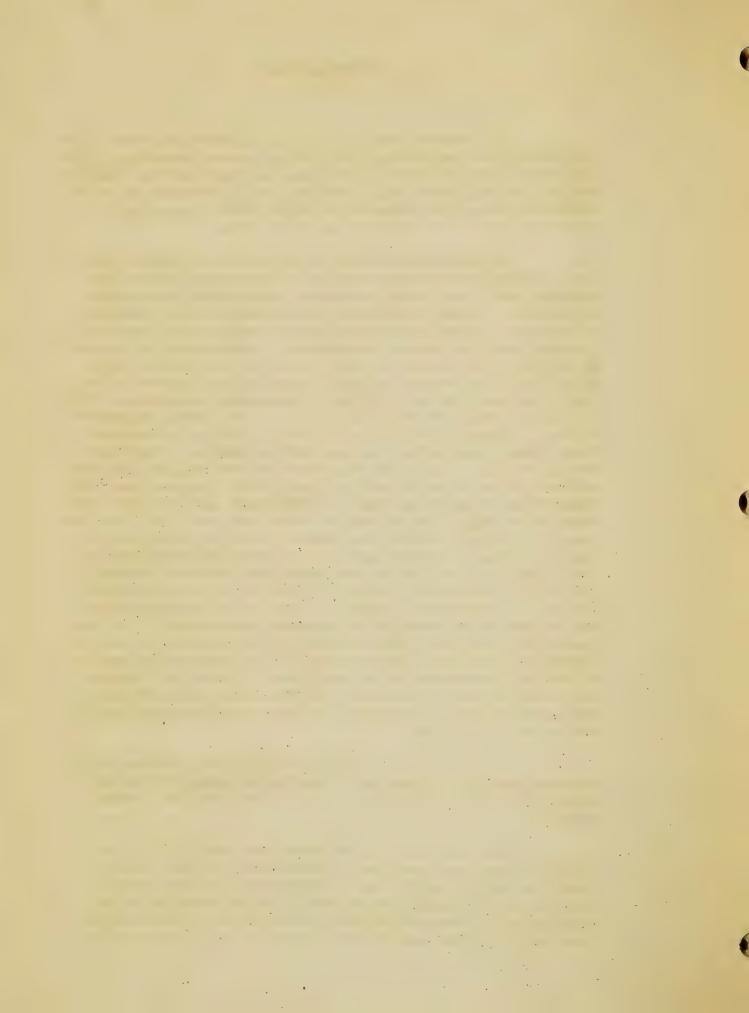
V. RECOMMENDATIONS

St. Charles County youth need information about jobs. They appreciate realistic conseling but resent preaching. The Employment Service can meet this need of youth but the fulfillment of its obligation will require careful planning of an extended program. The suggestions which follow are designed to point out some of the essentials of the plan.

Counseling regarding job opportunities and requirements should begin early, perhaps in the seventh grade, and continue until the youth has made a satisfactory vocational adjustment. In very few cases are the schools in a position to continue counseling from the time a pupil enters the seventh grade until he secures employment. Seldom does the student go directly from school to job. And from the time he leaves school until he makes an adequate vocational adjustment, he should be provided with realistic counseling facilities. These facilities should be available to him at the local employment office. Counseling should begin in the schools because many of these rural young people who are most in need of information are reluctant to visit the employment office because they lack exact information regarding its facilities. To overcome this handicap it is suggested that an Employment Service field representative visit the schools at least once each year as a new group of students reaches the seventh grade to establish contact with the, to inform them of the facilities available at their local office, and to encourage them to start thinking about their vocational problems. Through the cooperation of the schools students who plan to leave to go to work and who are interested in securing information about specific job opportunities could be organized into groups for discussion. Individual problems of the members of the group could be discussed by appointment at the employment office. In this way the youth may see a realistic picture of job opportunities and be encouraged to formulate his own decision regarding the choice of a vocation.

To carry out this plan the Employment Service would require specific information concerning at least three factors: The individual youth, job opportunities, and economic trends.

To secure information about the individual it is suggested that a cooperative arrangement be worked out between the public and parchial schools and the Employment Service so that cumulative records could be prepared in the schools and be made available to the Service. These cumulative records should include the scores or grades secured by



the student on general aptitude and achievement tests. In addition to these academic measures, teachers' appraisals, and school grades, certain vocational aptitude tests could be administered to the students in groups at the school or individually at the employment office. Definite procedures for test administration would need to be worked out in the light of our present knowledge of the validity of available tests and in consideration of the practical features of cost, personnel, etc.

The Employment Service may secure information about jobs from descriptions published by the United States Employment Service, and from monographs of selected industries in the St. Louis Area prepared by this community survey center. (A bibliography of the material follows this section). Nothing however, would take the place of detailed first-hand knowledge of jobs in the local community and in the larger industrial area. The Employment Service personnel should consider the study of job descriptions as a starting point from which to acquire precise information about jobs in the local community. Plant visits will have much more meaning to the interviewer who has prepared himself for them by a study of the appropriate job descriptions. Through these scurces knowledge may be obtained of the operations performed on a variety of jobs and the qualifications demanded of the worker for successful accomplishment of the tasks.

In addition to facts about the individual and facts about the job, Employment Service personnel would need to possess information about economic trends in individual industries of the local community and in the wider area in order to describe realistically the employment opportunities available to St. Charles County youth. A knowledge of the demand for and the supply of labor in the local market and in the St. Louis Industrial Area would permit the employment office representative to describe to the youth current opportunities in this community and in the nearby area. Local industries which are expanding and those which are declining could be enumerated and surpluses and shortages of labor could be pointed out. The prevailing hours, wages, and working conditions for each job should be described and the seasonality of employment, technological changes impending, and the relative security of employment should be made known to youth. The St. Louis Community Survey Center is undertaking several industry studies designed to provide this information for counselors and for the youth themselves.

On the basis of these facts, minimum standards of achievement for various jobs could be set up for youth who wish to migrate to St. Louis. Those who failed to meet these standards should be encouraged to secure additional training

or advised to seek other employment, the nature of which would be determined by personal data and available opportunities. Those youth who are able to meet employers hiring requirements should be instructed in the techniques of getting and holding a job. This instruction should include such topics as appearance; care of the hair face, hands, clothing, shoes; what to say and how to say it during the interview; preparation of letters of application; etc. In the case of girls who will apply for stenographic positions instructions of this nature are particularly important because few employers consider current youth fashions in dress and other details of appearance to be fitting for the office. For those migrating, arrangements could be worked out between the local employment office and the office in St. Louis so that the cumulative records would be available to the St. Louis placement personnel for those youth who wished employment there.

The suggestions outlined here must be tentative because some of them cannot be carried out within the limits of our present knowledge. However, an early begining should be made by the Employment Service and the schools to pool all data now available concerning individuals, jobs, and opportunities. In that way a foundation may be set upon which both organizations may build a future structure which will increase their usefulness to their community.

JOB INFORMATION

Published by THE UNITED STATES EMPLOYMENT SERVICE(1)

- Occupational Titles and Codes for Use in Public Employment Offices, Volume 1, Group Arrangement; Employment Office Manual Series, Section B, 124 pp., 1936, 50 cents.
- Occupational Titles and Codes for Use in Public Employment Offices, Volume 2, Alphabetic Arrangement; Employment Office Manual Series, Section C, 116 pp., 1936, 75 cents.
- Job Specifications for the Automobile-manufacturing Industry, June 1935, 3 volumes, total cost \$2.50, sold only in sets.
- (1) May be obtained only by purchase from the Superintendent of Documents, Government Printing Office, Washington, D. C., at prices indicated. Stamps are not acceptable in payment.

- Job Specifications for the Cotton Textile Industry, June 1925, 1 volume, 254 pp., \$1.00.
- Job Descriptions for the Construction Industry, July 1936, 5 volumes, total cost \$5.25, sold only in sets.
- Job Descriptions for the Laundry Industry, June 1937, 1 volume, 291.pp., \$25.
- Job Descriptions for Hotels and Restaurants, April 1938, 2 volumes, total cost \$2.00, sold only in sets.
- Job Descriptions for Job Foundries, April 1938, 1 volume, 166 pp., \$1.25.
- Job Descriptions for Job Machine Shops, April 1938, 1 volume, 196 pp., 75 cents.
- Job Descriptions for the Retail Trade, April 1938, 3 volumes, total cost \$3.00, sold only in sets.
- Job Descriptions for the Cleaning, Dyeing, and Pressing Industry, October 1938, 1 volume, 344 pp., \$1.00.
- Industrial Classifications and Codes for Use in Public Employment Offices, July 1938, 78 pp., 35 cents.

NATIONAL JOB DESCRIPTIONS IN PROCESS UNITED STATES EMPLOYMENT SERVICE

The United States Employment Service has in process national job descriptions for the following industries:

Slaughtering and Meat Packing

Baking

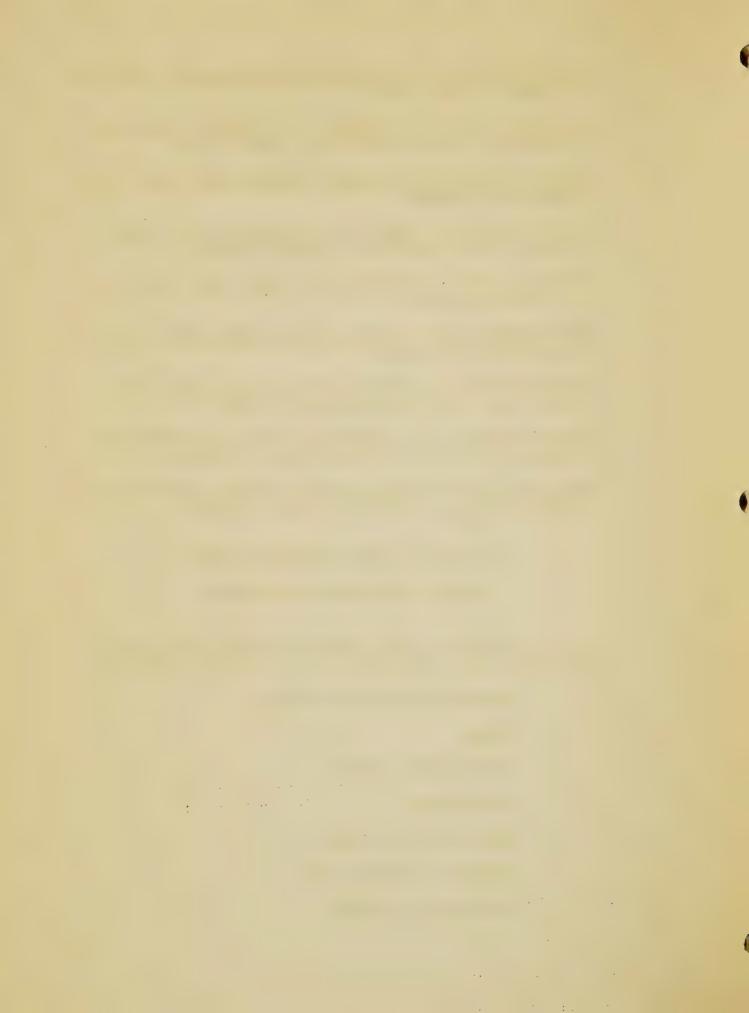
Garment Manufacturing

Confectionery

Lumber and Woodworking

Hat and Cap Manufacturing

Canning and Preserving



INDUSTRY MONOGRAPHS IN PROCESS

St. Louis Community Survey Center

The St. Louis Community Survey Center has completed or in process job monographs for the following local industries:

Job Foundries

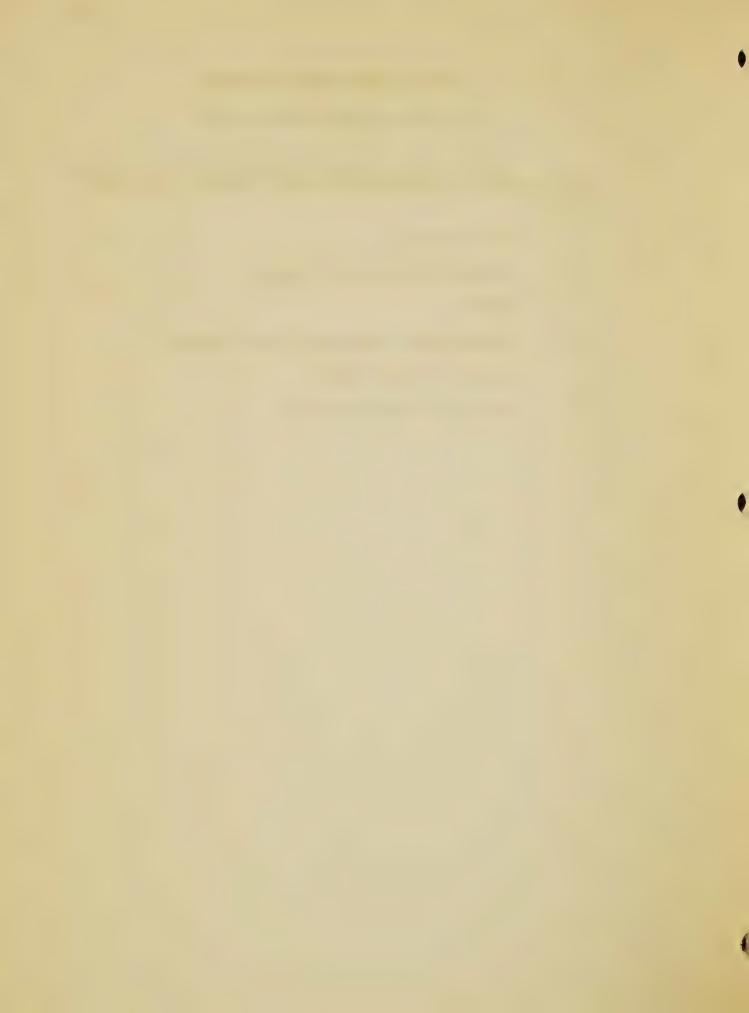
Slaughtering and Meat Packing

Hotels

Restaurants, Eating and Drinking Places

Aircraft Manufacturing

Hat and Cap Manufacturing



APPENDIX

Explanatory Notes

- 1. Methods for Estimating the Population, St. Charles County, Missouri, 1940.
- 2. Methods for Estimating the Number of Gainful Workers, St. Charles County, Missouri, 1940.



1. - METHODS FOR ESTIMATING THE POPULATION, ST. CHARLES COUNTY, MISSOURI, 1940

Estimates of the population for St. Charles County for 1940 are based upon the following factors: (1) The number of survivors of the 1930 population. (2) The net migration. (3) The number of births.

The population of St. Charles County in 1930 is reported in the Fifteenth Census of the United States by five-year intervals to age 34, by color, nativity, and sex. This makes it possible to apply to these age groups actual five-year time interval, five-year death rates for the period 1930 to 1934. In this way the number of survivors of the 1930 population may be obtained for 1935. Estimated five-year time intervals and five-year death rates are available for the period 1935 to 1939. These death rates may be applied to the estimated number of survivors in 1935 to obtain the estimates for 1940. (1) The population over 35 years of age in St. Charles County in 1930 is reported by ten-year age groups, by nativity, color, and sex. To determine the percentage surviving in 1940 for these age groups, we have resort to the population estimates prepared for the United States by the National Resources Committee from 1930 to 1980. These estimates have been prepared by age, color, nativity, and sex. To determine for any specific age, color, nativity group the percentage surviving in 1940 it is neccessary to relate the population of the age groups in 1930 to that in the age roup of 1940 which is 10 years older. In this way the percent surviving in 1940 for specific age groups for 1930 may readily be obtained. By means of these two methods we are able to determine the number of survivors in 1940 of the population in 1930. Both of these methods are based upon the assumption that national death rates apply to St. Charles County. In as much as conditions in St. Charles County, from field study appear fairly typical of rural areas it seems reasonable to assume that national statistics are appropriate for application to the local area. Having determined the number of survivors of the 1930 population it becomes necessary to make allowances for migration into and out of the county. Estimates of migration are based upon the assumption that trends existing between 1920 and 1930 will be continued into the decade, 1930 to 1940. The steps in this procedure are as follows: (1) The percent change for native

⁽¹⁾ These estimated and actual death rates from 1930 to 1980 will be found in Population Statistics 1. National Data, National Resources Committee, October 1937, pp. 3 to 8.

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whites in related age groups, 1920 to 1930 for the United States is calculated. (See columns 2, 5, and 7 in table 25) The persons in age group 0 to 4 in 1920 are 10 to 14 by 1930, 5 to 9 become 15 to 19, etc. (2) The percentage change for native whites in selected age groups, 1920 to 1930 for St. Charles County is calculated. (See columns 3, 6, and 9 in table 25) (3) The percentage change for the native white population of the United States is assumed to be what might be expected if there were no migration. The difference between the United States and the county figures is assumed to be the percent difference due to migration. (See column 9 in table 25) (4) The percent increase or decrease due to migration is multiplied by the number in each age group at the beginning of the decade to secure the number migrating. (See column 10 in table 25) A similar procedure is followed for Negroes.

For the native white population in the age groups 0 to 4, and 5 to 9 in 1920, immigration rather than emigration was taking place from 1920 to 1930. The explanation for this increase is found in the fact that there were expanding opportunities in manufactures which caused wage earners with children to move into the county.

The native white male population 5 to 9 years of age in 1920 was 1,045. In 1930 this group became 15 to 19 and the census reports 1,047 persons in that age group. A net increase of 2 persons for the decade.

Reference to the estimated migration for this age group during the decade indicates that 24 native white males moved into the county from 1920 to 1930, who were 5 to 9 years of age in 1920. Reference to the United States figures for these age groups indicates a slight loss in population between 1920 and 1930. While the nation as a whole was losing in population for these specific age groups, St. Charles County actually gained. Therefore, it is estimated that in order to replace the persons who died during the decade and to show a slight increase in population it was necessary for 24 persons of this specific age, sex, color, nativity group to move into the county.

To complete our estimates of the population in St. Charles County in 1940 it is necessary to estimate the number of births by color and sex during the period. These estimates of the number of children born during the period and who survived until 1940 were obtained in the following manner: (1) Ratios of children under 10 to females 20 to 44 in 1930 were obtained. (2) These ratios were then applied to the estimated number of females 20 to 44 in 1940 to secure an estimate of the number of children under 10 who survived until 1940.

TABLE 25. - ESTIMATES OF MIGRATION FOR NATIVE WHITE POPULATION BY AGE AND SEX, 1920 TO 1930, ST. CHARLES COUNTY, MISSOURI

	Estimated migration (product Cols. 9 and 3)		(10)		-100	+ 21 + 24 - 87 - 167 - 79 + 188 - 241 - 6 - 158 - 185 + 17	2 +
	Difference in percent change (Col. 8 minus Col. 7)		(6)			+ 2.0042 + 2.3080 - 8.4611 -16.8448 - 2.0761 + 8.3625 + 2.0042 -14.2989 -17.4083 + 0.636	+ 3.1627
	Percent loss or	Saint Charles County	(8)			+ 2.5376 + 0.1914 -13.3010 -20.7280 - 6.0021 -22.9157 + 2.2684 - 1.1000 -14.5833 -19.5283 -19.5283	-24.5924
1930	Percent	United	(7)			+ 0.5334 - 2.1166 - 4.8399 - 3.8832 - 3.9260 -31.2782 + 0.8185 - 0.4954 - 0.4954 - 0.2844 - 2.1200 - 5.7955	-27.7551
	ir	Saint Charles County	(9)		660,6		1,665
	Number	United States	(5)		24,872,212	5,265,795 4,907,316 4,346,913 3,731,794 13,963,526 5,224,068 5,132,751 4,879,638 4,457,250 3,820,896	5,161,132
	Age		(7)		All ages	to 14 to 19 to 24 to 29 to 29 to 54 and over All ages to 14 to 19 to 29 to 29	over
	ır	Saint Charles County	(3)		10,153	1,064 1,045 1,030 3,782 2,243 1,058 1,000 1,000	2,208
1920	Number	United	(2)		40,837,740	5,237,857 5,013,431 4,567,998 3,882,561 14,534,130 7,601,763 6,091,080 4,903,930 4,459,962 3,903,652	7,143,941
	Age group and sex		(1)	Male	All ages	0 to 4 5 to 9 10 to 14 15 to 19 20 to 44 45 and over Female All ages 0 to 4 5 to 9 10 to 14 15 to 19 15 to 19	and



TABLE 26. - ESTIMATES OF MIGRATION FOR NEGRO POPULATION BY AGE AND SEX, 1920 TO 1930, ST. CHARLES COUNTY, MISSOURI

	Estimated	(product Cols. 9 and 3)	(10)	Control of the Contro	- 59	- 21	+ 1 1 4		-124	- 15	- 27	- 32	4 +
	Difference in percent change (Col. 8 minus Col. 7)		(6)			-33.4106 -18.9615 -31.5037	-25.4882 - 5.6595 +12.7274			-24.2595	-39.4399	-15.4618	+ 2.7713
	Percent loss or gain from 1920	Saint Charles County	(8)			-23.8095 -24.6153 -41.6666	-28.0000 -14.7465 -35.6725			-15.0000	-34.7826	-29.9517	-40.2778
1930		United	(2)			+ 9.6011 - 5.6538 -10.1632	- 2.5118 - 9.0870 -48.4009			+ 9.2595	+ 4.6573	-14.4899	-43.0491
	r	Saint Charles County	(9)		740	647	36.		707	51	33	145	86
	Number	United	(5)		4,557,626	623,228 595,646 553,622	500,520 1,787,364 497,246		4,721,199	628,314	649,569	1,790,128	427,039
	Age group		(7)		All ages	10 to 14 15 to 19 20 to 24	771		All ages	10 to 14 15 to 19		to	55 and over
	r	Saint Charles County	(3)		638	63	50 217 171		609	60	69	207	1444
1920	Number	United	(2)		5,259,329	568,633 631,341 616,251	513,416 1,966,016 963,672		5,243,702	575,066	620,663	2,093,470	749,838
	Age group and sex		(1)	Male	All ages	0 to 4 5 to 9 10 to 14	15 to 19 20 to 44 45 and over	Females	All ages	0 to 4 5 to 9	10 to 14 15 to 19	3	45 and over

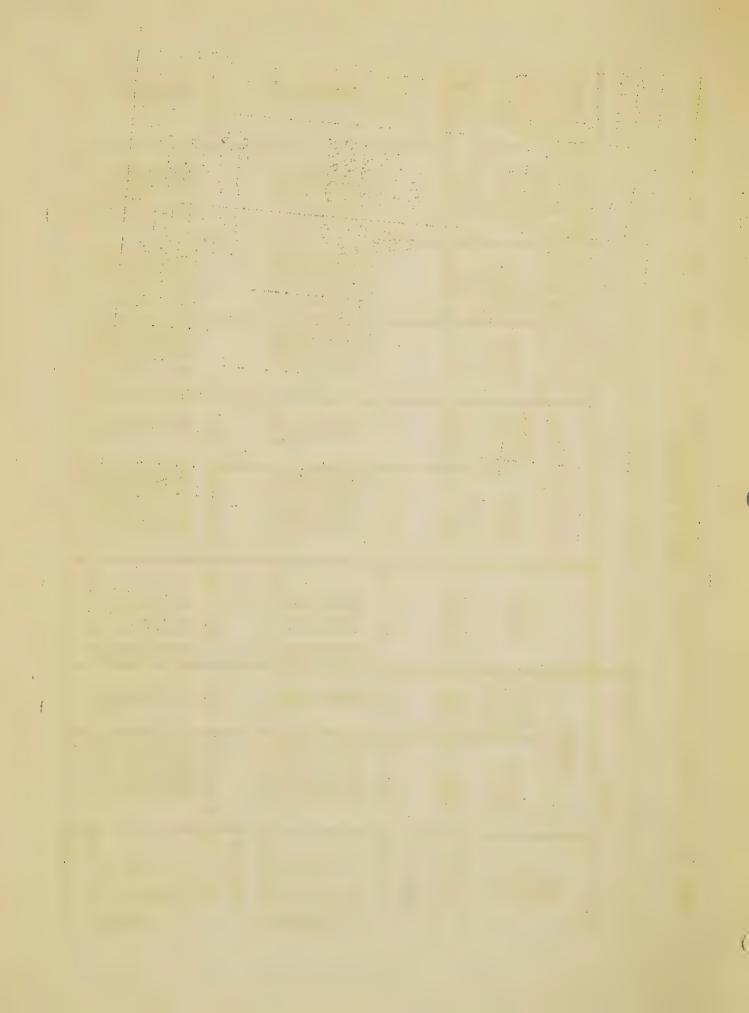


TABLE 27. - NATIVE WHITE POPULATION 1930, ESTIMATED NUMBER OF SURVIVORS 1940, ESTIMATED NUMBER OF MIGRANTS 1930 TO 1940, AND ESTIMATED POPULATION 1940, BY AGE GROUP AND SEX, ST. CHARLES COUNTY, MISSOURI

Age group and sex	Population 1930	Estimated number of survivors 1940	number of	Age group and sex	Estimated population 1940	
(1)	(2)	(3)	(4)	(5)	(6)	
Male Total O to 4 5 to 9 10 to 14	11,328 1,082 1,144 1,091	1,111 1,126 1,069	- 100 + 21 + 24 - 87	0 to 9 10 to 14 15 to 19 20 to 24	12,312 2,288 1,132 1,150 982	
15 to 19 20 to 24 25 to 29 30 to 34 35 to 44 45 to 54 55 to 64 65 to 74 75 and over Unknown	1,047 893 784 793 1,546 1,216 985 584 160	1,019 865 754 755 1,425 1,216 687 256 26	- 167 - 18 - 16 - 16 - 29 + 97 + 65 + 24 + 2	25 to 29 30 to 34 35 to 39 40 to 44 45 to 54 55 to 64 65 to 74 75 to 84 85 and over	852 847 738 739 1,396 1,128 752 280 28	
Female Total	11,173	10,201	- 241		12,113	
0 to 4 5 to 9 10 to 14 15 to 19 20 to 24 25 to 29 30 to 34 35 to 44 45 to 54 55 to 64 65 to 74 75 and over Unknown	1,038 1,058 1,082 989 943 853 848 1,477 1,219 941 550 174	1,070 1,045 1,065 966 916 824 834 1,388 1,079 710 273 31	+ 21 - 6 - 158 - 185 + 4 - 3 + 4 + 36 + 24 + 9 + 1	0 to 9 10 to 14 15 to 19 20 to 24 25 to 29 30 to 34 35 to 39 40 to 44 45 to 54 55 to 64 65 to 74 75 to 84 85 and over	2,153 1,091 1,039 907 781 920 827 838 1,394 1,115 734 282 32	

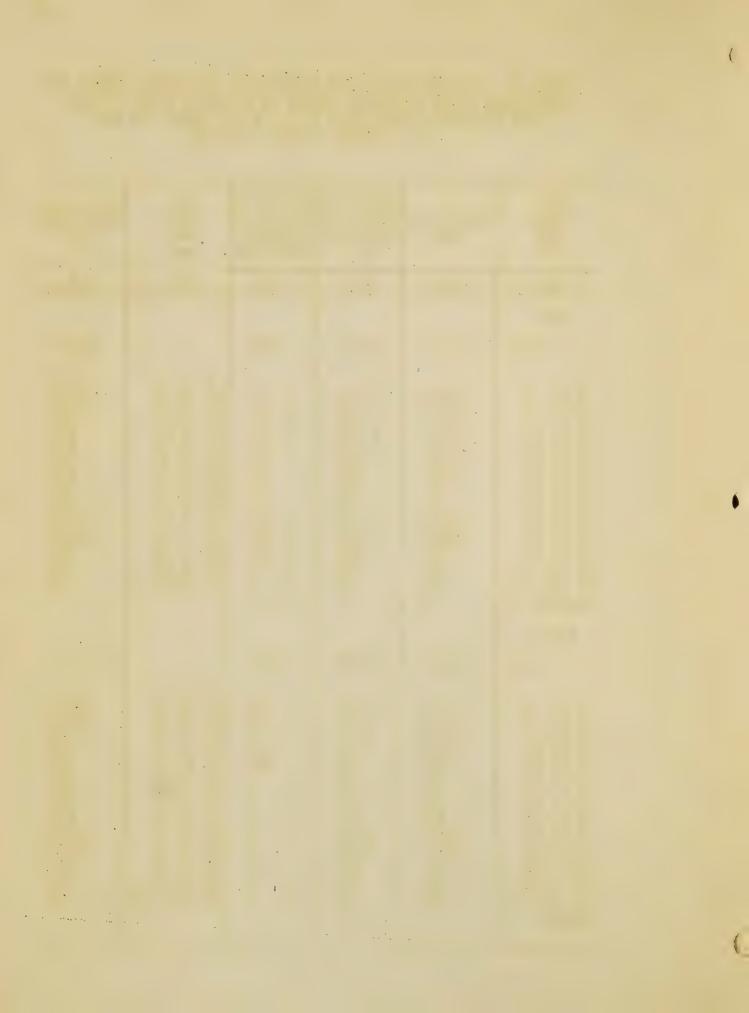


TABLE 28. - FOREIGN BORN WHITE POPULATION 1930, ESTIMATED NUMBER OF SURVIVORS 1940, ESTIMATED NUMBER OF MIGRANTS 1930 TO 1940, AND ESTIMATED POPULATION 1940, BY AGE GROUP AND SEX, ST. CHARLES COUNTY, MISSOURI

Age group Population and 1930 sex				Age group and sex	Estimated population 1940	
(1)	(2)	(3)	(4)	(5)	(6)	
Male					0.40	
Total	432	240			240	
0 to 4 5 to 9 10 to 14 15 to 19 20 to 24 25 to 29 30 to 34 35 to 44 45 to 54 55 to 64 65 to 74 75 and over	1 1 2 10 8 13 32 63 94 127 81	1 1 2 10 8 13 28 51 61 54 11	The number of migrants was not	10 to 14 15 to 19 20 to 24 25 to 29 30 to 34 35 to 39 40 to 44 45 to 54 55 to 64 65 to 74 75 to 84 85 and over	1 1 2 10 8 13 28 51 61 54	
Female			estimated			
Total	357	210	for this		210	
0 to 4 5 to 9 10 to 14 15 to 19 20 to 24 25 to 29 30 to 34 35 to 44 45 to 54 55 to 64 65 to 74 75 and over	1 3 1 1 8 7 40 70 70 90 76	1 3 1 8 7 37 51 49 41	nativity group	10 to 14 15 to 19 20 to 24 25 to 29 30 to 34 35 to 39 40 to 44 45 to 54 55 to 64 65 to 74 75 to 84 85 and over	1 3 1 1 8 7 37 51 49 41	

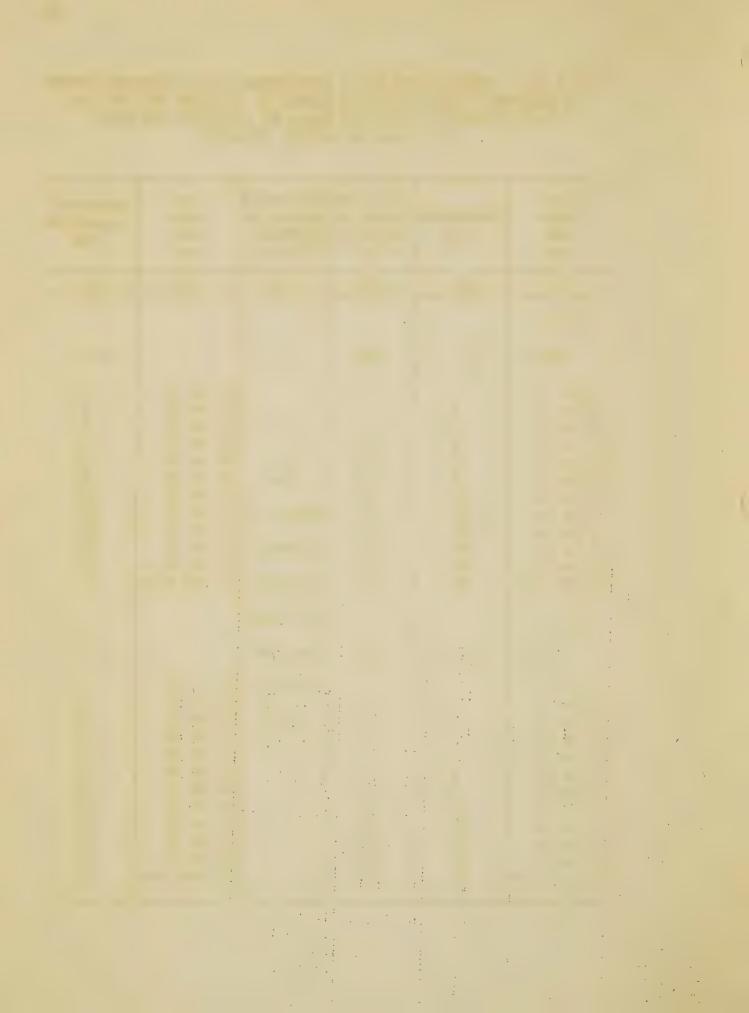
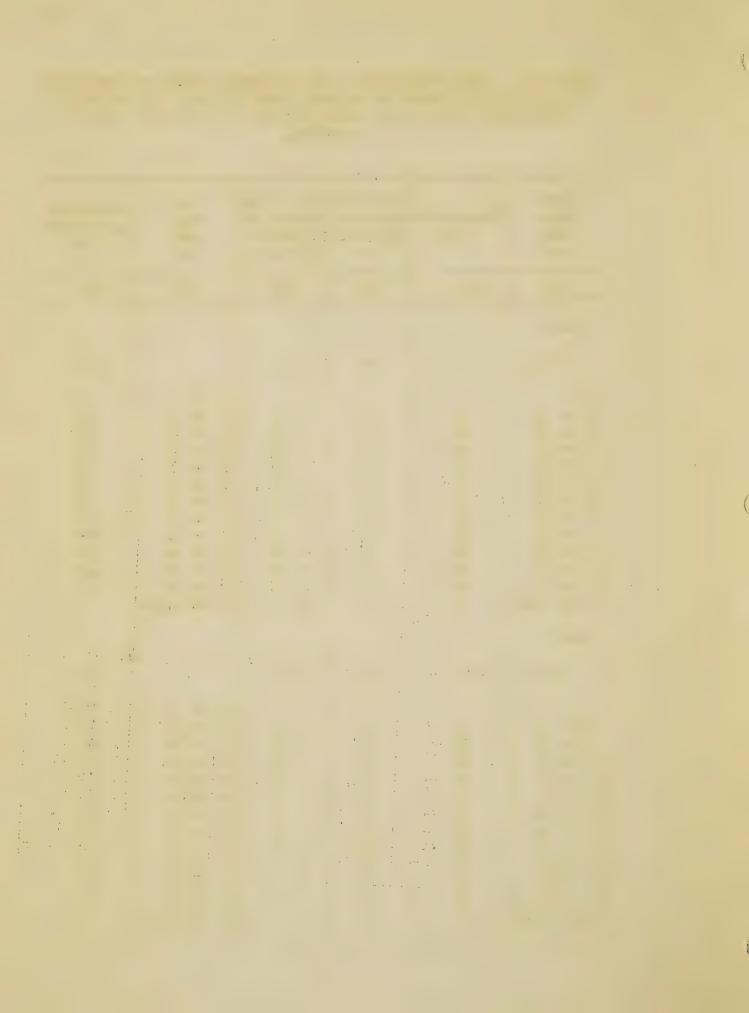


TABLE 29. - NEGRO POPULATION 1930, ESTIMATED NUMBER OF SURVIVORS 1940, ESTIMATED NUMBER OF MIGRANTS 1930 TO 1940, AND ESTIMATED POPULATION 1940, BY AGE GROUP AND SEX, ST. CHARLES COUNTY, MISSOURI

Age group and sex	Population 1930	Estimated number of survivors 1940	Estimated number of migrants 1930-1940	Age group and sex	Estimated population 1940	
(1)	(2)	(3)	(4)	(5)	(6)	
Male Total	552	449	- 59		444	
0 to 4 5 to 9 10 to 14 15 to 19 20 to 24 25 to 29 30 to 34 35 to 44 45 to 54 55 to 64 65 to 74 75 and over	39 43 48 49 42 36 32 87 66 58 36 16	43 42 46 45 38 32 28 71 49 36 16 3	- 21 - 12 - 23 - 13 - 2 - 2 - 5 + 10 + 3 + 1	0 to 9 10 to 14 15 to 19 20 to 24 25 to 29 30 to 34 35 to 39 40 to 44 45 to 54 55 to 64 65 to 74 75 to 84 85 and over	54 22 30 23 32 35 30 26 66 59 44 19	
Female Total	511	446	-124		395	
0 to 4 5 to 9 10 to 14 15 to 19 20 to 24 25 to 29 30 to 34 35 to 44 45 to 54 55 to 64 65 to 74 75 and over	51 56 51 44 45 33 26 72 47 46 26 14	57 54 49 41 41 39 23 61 35 29 13 4	- 15 - 23 - 27 - 31 - 8 - 8 - 4 - 12 + 1 + 1 + 0	0 to 9 10 to 14 15 to 19 20 to 24 25 to 29 30 to 34 35 to 39 40 to 44 45 to 54 55 to 64 65 to 74 75 to 84 85 and over	73 42 31 22 10 33 31 19 49 37 30 14	



2. - METHODS FOR ESTIMATING THE NUMBER OF GAINFUL WORKERS, ST. CHARLES COUNTY, MISSOURI, 1940

Having prepared estimates of the population in 1940 for St. Charles County by color, nativity, and sex, it is now possible to estimate the number available for employment in 1940 by reference to the enumerative check, conducted in connection with the census of unemployment, 1937.(1) The percentages of the population available for employment by age, color, and sex were those obtained for 1937 and reported in the enumerative check. (2) These data did not include the group under 15, and those 75 and over. The number employed or available for employment in these groups was therefore extrapolated by reference to the distribution of the 1930 census. The number thus derived was then divided by the population for the group to obtain the rate. The fundamental assumption concerning work rates is that they will remain stable; that is that any given age group in 1937, will have the same rates as that age group in 1940. For the males this assumption is probably not far from the truth. Their work rates between age 25 and 50 have been so high at all times in the past that only small fluctuations may be expected. It is possible, however, that the work rates may change in the youngest and oldest groups in response to social measures which may be taken to keep the young men in school longer and to retire old men sooner on pensions. Conversely, it is possible that widespread unemployment in the middle age groups may drive older and younger people in larger proportion to the labor market. The later possibility is especially applicable to the female population as evidenced by the very large increases in the work rates for women between 1930 and 1937. The application of these percentages to the estimated population in 1940 is shown in table 30.

⁽¹⁾ The enumerative check was a nation-wide sample of the population. Data were secured by means of a door to door enumeration for the purpose of establishing the degree of completeness of the voluntary unemployment census, November 1937. However, because it was an actual enumeration the check census supplied information concerning employment as well as unemployment within the limits of sampling accuracy. The enumerative check provides the most recent information concerning the total labor supply (employed or available for employment). The results of the check are published as vol. IV, of the "Final Report on Total and Partial Unemployment", issued by the Census of Partial Employment, Unemployment, and Occupations. Op. cit., table 15, page 39. (2)

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TABLE 30. - ESTIMATED POPULATION 1940, ESTIMATED PERCENT AVAILABLE FOR EMPLOYMENT 1937, AND ESTIMATED NUMBER AVAILABLE FOR EMPLOYMENT 1940, BY AGE, COLOR, AND SEX, ST. CHARLES COUNTY, MISSOURI

		White			Negro	
Age group and sex	Estimated population 1940	Estimated percent available for employment 1937	Estimated number available for employment 1940	Estimated population 1940	Estimated percent available for employment 1937	Estimated number available for employment 1940
Male						
Total	10,264		7,474	390		313
10 to 14 15 to 19 20 to 24 25 to 34 35 to 44 45 to 54 55 to 64 65 to 74 75 and over	1,132 1,151 983 1,711 1,498 1,424 1,179 813 373	2.8 43.6 90.1 97.0 96.8 95.2 87.6 57.4 23.2	32 502 886 1,660 1,450 1,356 1,033 467 88	22 30 23 67 56 66 59 44 23	12.4 56.6 91.2 96.4 95.4 94.1 88.6 62.6 50.5	3 17 21 65 53 62 52 28 12
Female						
Total	10,170		2,468	322		121
10 to 14 15 to 19 20 to 24 25 to 34 35 to 44 45 to 54 55 to 64 65 to 74 75 and over	1,091 1,040 910 1,703 1,680 1,431 1,166 783 366	.9 32.1 53.6 36.1 27.0 21.9 16.0 7.6 2.0	10 334 488 615 454 313 187 60 7	42 31 22 43 50 49 37 30 18	6.5 34.9 56.9 58.7 54.7 47.3 35.4 18.1 8.2	3 11 13 25 27 23 13 5

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TABLE 31. - ESTIMATES OF THE NUMBER OF GAINFUL WORKERS BY SEX AND UNEMPLOYMENT STATUS, ST. CHARLES COUNTY, MISSOURI, 1937

Item	Total	Male	Female
Gainful workers 10 years old and over, 1930, (less unpaid family workers in a gricul-			- (2.00
ture)	8,936	7,319	1,617
Estimated number of gainful workers 10 years old and over, 1940	10,376	7,787	2,589
Difference	1,440	468	972
Estimated number of gainful workers 10 years old and over, November 1937(1)	10,028	7,674	2,354
Totally unemployed, 1937	629	476	153
Percent complete		72.4	48.6
Emergency workers, 1937	115	96	19
Percent complete		97.3	77.4
Partly unemployed, 1937	306	259	47
Percent complete		76.4	38.7
Estimates of the number in each unemployment class secured by applying percentages of completion to the number of respondents			
Totally unemployed	971	_	-
Emergency workers Partly unemployed	124 460		25 121
Estimated number of totally unemployed and emergency workers as a percentage of the estimated number of gainful workers, 1937	10.9	9.9	14.4
Estimated number of totally unemployed, emergency workers, and partially unemployed as a percentage of the estimated number			
of gainful workers, 1937	15.5	14.3	19.5

⁽¹⁾ The fifteenth census was taken April 1, 1930. November 1937 would represent 91/120 of the time elapsed between April 1, 1930 and April 1, 1940.

TABLE 32. - POPULATION 15 YEARS OLD AND OVER, 1930, AND ESTIMATES OF UN-EMPLOYMENT, 1937, FOR ST. CHARLES COUNTY, MISSOURI, AND PERSONS ENUMER-ATED IN CHECK AREAS FOR THE UNITED STATES, 1937, BY SEX, FARM OR NON-FARM RESIDENCE, AND PERCENT DISTRIBUTION

		Ma	ale		Female				
Area, etc.	Farm		Non-farm		Farm		Non-farm		
	Number	Per- cent	Number	Per- cent		Per- cent	Number	Per-	
St. Charles County									
Population, 1930(1)	3,569	40.3	5,295	59.7	2,829	32.5	5,872	67.5	
Totally unemployed and emergency workers, 1937(2)	133	15.3	738	84.7	15	6.9	203	93.1	
United States (3)									
Population, 1937	156,743	21.6	568,321	78.4	138,001	1.8.6	602,459	81.4	
Totally unemployed and emergency workers, 1937	17,714	15.6	95,589	84.4	5,588	9.6	52,481	90.4	

(1) Fifteenth Census of the United States, 1930, Population, vol. III, part I, pp. 1345 and 1353.

(2) Census of Partial Employment, Unemployment, and Occupations, 1937, vol. II, p. 433. Not corrected for under-enumeration.

(3) Census of Partial Employment, Unemployment, and Occupations, 1937, vol. IV, pp. 47 and 48. Data refers to persons enumerated in check areas.

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TABLE 33. - NUMBER AND PERCENT DISTRIBUTION OF UNEMPLOYED, CLASSES "A" AND "B" BY SEX, ST. CHARLES COUNTY, MISSOURI, 1930

Employment	To	tal	Ma	ale	Female		
class	Number	Percent	Number	Percent	Number	Percent	
Gainful workers	8,936	100.0	7,319	81.9	1,617	18.1	
Class "A"(2)	264	100.0	244	92.2	20	7.8	
Class "B"(3)	123	100.0	118	95.9	5	4.1	
Classes "A" and "B"	387	100.0	362	93.5	25	6.5	

⁽¹⁾ Data from Fifteenth Census of the United States, 1930, Unemployed Bulletin, Missouri, table 10, p. 19.

⁽²⁾ Persons out of a job able to work and looking for a job.

⁽³⁾ Persons having jobs, but on layoff without pay, excluding those sick or voluntarily idle.

TABLE 34. - UNEMPLOYED REGISTRANTS, BY OCCUPATIONAL GROUP, ST. CHARLES COUNTY, MISSOURI, NOVEMBER 1937(1)

Occupational group	Total	Male	Female
All occupations	1,101	883	218
Professional persons	20	1.2	8
Farmers, (owners and tenants)	19	18	1
Other proprietors, managers, officials	5	5	
Clerks and kindred workers	77	43	34
Skilled workers and foremen	163	163	-
Semi-skilled workers	227	174	53
Farm laborers	101	101	-
Other laborers	261	257	4
Servant classes	53	7	46
Occupations not reported	27	21	6
New workers 15 to 24 years old	114	64	50
25 and over	34	18	16

Source: Census of Partial Employment, Unemployment, and Occupations, 1937, Final Report on Total and Partial Unemployment for Missouri, table 13, p. 43.

(1) Includes "totally unemployed" and "emergency workers".



TABLE 35. - ACRES IN CROPS BY NUMBER AND PERCENT CHANGE, ST. CHARLES COUNTY, MISSOURI, 1900 TO 1935

Year	Number	Percent increase or decrease
1935	(1) _{166,246}	+ 1.7
1930	(2) _{163,428}	- 4.1
1925	(3) _{170,457}	- 25.9
1920	(4)229,965	- 1.4
1910	(5) _{233,217}	+ 5.7
1900	(6) _{220,491}	

(1) United States Census of Agriculture, 1935, vol. I, County table I, p. 270.

(2) Fifteenth Census of the United States, 1930, Agriculture, Missouri Statistics by Counties, First Series, Farms, Acreage, Values, and Selected Livestock and Crops, table I, p. 13.

(3) United States Census of Agriculture, 1925, pt. I, Northern States, table I, p. 930.

(4) Fourteenth Census of the United States, 1920, vol. VI, pt. I, table I, p. 586.

(5) Thirteenth Census of the United States, 1910, vol. VI, table I, p. 914.

(6) Twelfth Census of the United States, 1900, pt. I, table 19, p. 286.

TABLE 36. - ACRES IN WHEAT, CORN, AND OATS BY NUMBER AND PERCENT CHANGE, ST. CHARLES COUNTY, MISSOURI, 1899 TO 1934

Item	(1) 1934	1929	1924	1919	(5) 1909	(6) 1899
Winter wheat, acres	63,528	56,048	58,387	93,488	78,408	68,663
Percent change	+ 13.3	- 4.0	- 37.5	+ 19.2	+ 14.2	
Corn, acres	42,065	39,287	36,621	44,662	44,441	53,648
Percent change	+ 7.1	+ 7.3	- 18.0	+ •5	- 17.2	
Threshed oats, acres	2,553	3,693	5,131	8,734	6,527	11,130
Percent change	- 30.9	- 28.0	- 41.3	+ 33.8	- 41.4	

Census of Agriculture, 1935, table III, p. 285.

(2) Data for 1929 and 1919 from Fifteenth Census of the United States, 1930, Agriculture, Missouri Statistics by Counties, First Series, Farm Acreage, Values, and Selected Livestock and Crops, table V, p. 48.

(3) Census of Agriculture, 1925, pt. I, County table IV, p. 961.

(4) Thirteenth Census of the United States, 1910, vol. VI, table IV, p. 936.

(5) Twelfth Census of the United States, 1900, pt. II, Section I, table 55, p. 172.

TABLE 37. - CATTLE ON FARMS, DAIRY COWS, AND OTHER COWS, BY NUMBER AND PERCENT CHANGE, ST. CHARLES COUNTY, MISSOURI, 1900 TO 1935

Item	(1) 1935	1930	1925	1920	1910	1900
Cattle on farms (5)	15,541	15,705	14,623	16,667	15,371	17,201
Percent change	- 1.0	+ 7.4	- 12.3	+ 8.4	- 10.7	
Dairy cows	(6)	6,994	5,725	5,038	6,920	5,844
Percent change		+ 22.2	+ 13.6	- 27.2	+ 18.4	
Other cows	(6)	663	2,720	3,096	2,188	2,130
Percent change		- 75.6	- 12.1	+ 41.5	+ 2.7	

(1) United States Census of Agriculture, 1935, vol. I, County table II, p. 275.

(2) Data for 1930, 1925, and 1920 from Fifteenth Census of the United States, 1930, Agriculture, Missouri Statistics by Counties, First Series, Farms, Acreage, Values, and Selected Livestock and Crops, table IV, p. 38.

(3) Thirteenth Census of the United States, 1910, vol. VI, table I. p. 914.

(4) Twelfth Census of the United States, 1900, pt. I, table 35, p. 456.

(5) The sum of the "dairy cows" and "other cows" will not equal "cattle on farms" because the two former items do not include all the young stock.

(6) Data not available.

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TABLE 38. - NUMBER OF FRUIT TREES AND VINES, ST. CHARLES COUNTY, MISSOURI, 1900 TO 1935

Item	(1) 1935	(2) 1930	(3) 1925	(4) 1920	(5) 1910	(6) 1900
Apple trees	34,477	45,765	52,246	65,717	85,184	125,364
Peach trees	18,063	19,368	18,862	19,349	25,170	16,012
Cherry trees	3,896	3,126	(7)	5,448	3,423	1,823
Grape vines	35,187	33,158	23,963	24,750	51,339	82,786

(1) United States Census of Agriculture, 1935, vol. II, table VI, p. 306.

(2) Fifteenth Census of the United States, 1930, Agriculture, Missouri Statistics by Counties, Second Series, Farms, Acreage, Values and Selected Livestock and Crops, table VIII, p. 24.

(3) United States Census of Agriculture, 1925, pt. I, table IV, p. 961.

(4) Fourteenth Census of the United States, 1920, vol. VI, pt. I, table IV, p. 608.

(5) Thirteenth Census of the United States, 1910, vol. VI, table IV, p. 936.

(6) Twelfth Census of the United States, 1900, pt. II, Section VII, table II, p. 660 to 661.

(7) Data not available.

TABLE 39. - MILK PRODUCTION, BUTTER CHURNED ON FARMS, AND CREAM SOLD AS BUTTERFAT, ST. CHARLES COUNTY, MISSOURI, 1899 TO 1934

Year	Mil produc			churned farms	Cream sold as butterfat	
	Gallons Pe		Pounds	Percent	Gallons	Percent
1934(1)	2,771,786	-24.0	227,323	- 7.2	(7)	
1929(2)	3,644,862	+58.8	244,915	3	414,714	+618.0
1924(3)	2,295,720	+32.1	245,754	-22.4	57,762	+ 5.2
1919(4)	1,737,389	- 3.9	316,790	- 6.5	54,910	
1909(5)	1,807,859	-15.8	338,724	- 2.4	(7)	
1899(6)	2,146,182		346,975		127,990	

(1) United States Census of Agriculture, 1935, vol. II, table V, p. 297.

(2) Fifteenth Census of the United States, 1930, Agriculture, Missouri Statistics by Counties, Second Series, Selected Crops and Livestock, Mortgages, Taxes, etc., table IX, p. 31.

(3) United States Census of Agriculture, 1925, pt. I, table III. p. 945.

(4) Fourteenth Census of the United States, 1920, vol. VI, pt. I, table II, p. 597.

(5) Thirteenth Census of the United States, 1910, vol. VI, table III, p. 925.

(6) Twelfth Census of the United States, 1900, pt. I, tables 44 and 49, pp. 609 and 679.

(7) Data not available.

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TABLE 40. - TIME REQUIREMENTS IN SELECTED FARMING OPERATIONS IN SIX MISSOURI COUNTIES, 1929 TO 1931(1)

0	peration performed and power unit	Average number of acres per 10-hour man day
1.	Plow land	
	2 horses 3 horses 4 horses 10-20 tractor	1.8 2.9 4.0 8.1
2.	Harrow land 2 horses 3 horses 4 horses 10-20 tractor	16.7 17.2 23.3 32.3
3.	Disk land 3 horses 4 horses 10-20 tractor	5•2 8•6 23•8
4.	Sow small grain 2 horses - drill 3 horses - drill 4 horses - drill 10-20 tractor - drill	12.7 12.5 14.9 31.2

⁽¹⁾ Data furnished by B. H. Frame, Assistant Professor of Agricultural Economics, University of Missouri, in a letter of October 20, 1938. The counties are Atchison, Bates, Carroll, Linn, Saline, and Vernon. Most of the data apply to 1929.

TABLE 41. - FARMS BY NUMBER AND AVERAGE SIZE AND TOTAL ACRES IN FARMS WITH PERCENT CHANGE IN EACH, ST. CHARLES COUNTY, MISSOURI, 1900 TO 1935

Item	1935(1)	1930(2)	1925(3)	1920(4)	1910(5)	1900(6)
Number of farms	2,027	2,021	2,087	2,165	2,179	2,297
Percent change	+ •3	- 3.2	- 3.6	6	- 5.1	
Average size of farm (scres)	144.6	140.7	137.0	142.5	143.3	130.7
Percent change	+ 2.8	+ 2.7	- 3.9	6	+ 9.6	state seeds
All land in farms (acres)	293,092	284,415	285,847	308,424	312,312	300,171
Percent change	- 3.0	5	- 7.3	- 1.2	- 4.0	

(1)United States Census of Agriculture, 1935, vol. I, County table I, p. 270.

Fifteenwa Consus of the United States, 1930, Agriculture, Mis-(2)sound, Shatistics by Counties, First Series, Farms, Acreage, Values and Selected Livestock and Crops, table I, p. 13.

(3) United States Census of Agriculture, 1925, pt. I, table I, p. 930.

Four seenth Census of the United States, 1920, vol. VI, pt. I, (4) table i p. 436.

(5) Thirtesoth Census of the United States, 1910, vol. VI, table I. p. 314.

(6) Twelfith Census of the United States, 1900, pt. I, table 19, p. 286, and table 10, pp. 98 to 100.



TABLE 42. - HOURS OF MAN LABOR, HORSE LABOR, AND TRACTOR USE REQUIRED TO PRODUCE AN ACRE OF WINTER WHEAT IN SELECTED ILLINOIS COUNTIES, 1914 TO 1937(1)

Year(2)	Man hours	Horse hours	Tractor hours
1937	4.8	3.6	2.4
1936	5.6	5.1	2.1
1935	4.3	6.7	1.7
1934	6.6	9.6	1.6
1933	5.7	9.9	1.2
1932	5.3	8.0	1.4
1931	6.2	10.0	•9
1930	6.8	12.9	1.2
1929	9.8	15.7	1.4
1928(3)	ne ne	04/8	
1927	10.0	20.5	•9
1926	11.6	22.4	.6
1925	9.2	20.1	•4
1924	10.1	19.0	•5
1923	11.0	19.0	•5
1922	12.9	25.6	-8
1921	13.4	28.4	.6
1920	11.2	19.6	1.1
1919	18.1	49.7	.8
1918	12.1	18.0	2.4
1917(3)	ent.	war .	
1916	17.5	41.4	-
1915	17.2	38.9	649
1914	23.4	23.6	***

⁽¹⁾ Prepared by the Department of Agricultural Economics, University of Illinois, Urbana, Illinois, and received through correspondence from R. H. Wilcox, Associate Professor, Farm Management.

(2) 1914 - 1919 Hancock County

1920 - 1922 Hancock and Champaign-Piatt Counties (average of averages)

1923 - 1937 Champaign-Piatt Counties

1914 - 1928 All acreage threshed

1929 - 1937 Threshed and combined grain (weighted average)

(3) Data not available, crop winter killed.

TABLE 43. - HOURS OF MAN LABOR, HORSE LABOR, AND TRACTOR USE REQUIRED TO PRODUCE AN ACRE OF SOYBEANS IN CHAMPAIGN COUNTY, ILLINOIS, 1922 TO 1937(1)

tor hours
2.2
2.3
2.4
1.5
2.5
1.7
2.1
1.8
1.7
1.5
1.8
1.0
1.5
•9
•5
.7

⁽¹⁾ Prepared by the Department of Agricultural Economics, University of Illinois, Urbana, Illinois, and received through correspondence from R. H. Wilcox, Associate Professor, Farm Management.



TABLE 44. - HOURS OF MAN LABOR, HORSE LABOR, AND TRACTOR USE REQUIRED TO PRODUCE AN ACRE OF CORN IN CHAMPAIGN COUNTY, ILLINOIS, 1920 TO 1937(1)

Year	Man hours	Horse hours	Tractor hours
1937	8.9	9.2	3.6
1936	8.7	12.2	2.9
1935	11.3	20.6	2.5
1934	10.7	23.3	2.0
1933	10.2	20.4	2.0
1932	11.6	25.2	1.7
1931	12.2	26.6	1.7
1930	12.8	25.1	1.7
1929	12.1	25.9	1.6
1928	13.6	31.1	1.0
1927	12.7	30.6	1.2
1926	14.1	31.2	1.0
1925	13.9	34.1	.9
1924	12.8	28.0	.8
1923	14.4	36.7	•4
1922	13.9	33.5	.9
1921	15.0	33.4	.6
1920	14.2	33.4	•5

⁽¹⁾ Prepared by the Department of Agricultural Economics, University of Illinois, Urbana, Illinois and received through correspondence from R. H. Wilcox, Associate Professor, Farm Management.

TABLE 45. - HOURS OF MAN LABOR, HORSE LABOR, AND TRACTOR USE REQUIRED TO PRODUCE AN ACRE OF OATS IN CHAMPAIGN COUNTY, ILLINOIS, 1920 TO 1937(1)

Year	Man hours	Horse hours	Tractor hours
1937	6.3	5.2	1.4
1936	5.8	5.2	1.3
1935	6.7	7.6	1.1
1934	4.3	6.3	.7
1933	5.2	8.6	.6
1932	6.5	10.4	.7
1931	7.0	10.4	.7
1930	5.2	8.6	•5
1929	6.1	9.8	.6
1928	6.3	10.8	.5
1927	6.5	10.2	.6
1926	7.2	11.6	.5
1925	5.6	10.4	.5
1924	7.5	13.0	.2
1923	7.7	14.2	.1
1922	6.4	12.2	.2
1921	7.0	12.3	.3
1920	6.5	11.0	.1

⁽¹⁾ Prepared by the Department of Agricultural Economics, University of Illinois, Urbana, Illinois and received through correspondence from R. H. Wilcox, Associate Professor, Farm Management.

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U. S. DEPARTMENT OF LABOR UNITED STATES EMPLOYMENT SERVICE

Division of Methods and Standards 922 U.S. Court and Custom House

July 21, 1939

Dear Sir:

Enclosed is a preliminary copy of a study of "Youth and Employment Opportunities in St. Charles County, Missouri".

I hope you will find time to read it carefully and that you will let me have your comments, suggestions, and criticisms. I shall very greatly appreciate your cooperation.

Yours very truly,

Dreng Bjornaraa, Local Director

By Harold T. Smutz,

Supervisor,

Job Analysis Section.